

```
<210> 6720
<211> 162
<212> PRT
<213> S.epidermidis
```

```
<210> 6721
<211> 242
<212> PRT
<213> S.epidermidis
```

<400> 6721															
Phe	Tyr	Tyr	Phe	Ile	Gly	Glu	Thr	Gly	Ala	Asp	Asn	Met	Thr	His	Leu
1				5					10					15	
Thr	Phe	Lys	Gln	Gly	Val	Lys	Glu	Cys	Ile	Pro	Thr	Leu	Leu	Gly	Tyr
			20					25					30		
Ala	Gly	Val	Gly	Leu	Ser	Phe	Gly	Ile	Val	Ala	Ala	Ser	Gln	Asn	Phe
			35				40					45			
Ser	Val	Leu	Glu	Ile	Ile	Leu	Leu	Cys	Leu	Ile	Ile	Tyr	Ala	Gly	Ala
	50					55					60				
Ala	Gln	Phe	Ile	Ile	Cys	Thr	Leu	Val	Ile	Ala	Gly	Thr	Pro	Ile	Ser
65					70					75					80

Leu
65

<210> 6724
<211> 44
<212> PRT
<213> S.epidermidis

<400> 6724
Gly Phe Ser Ala Ser Asn Lys Lys His Ser Phe Phe Val Lys Ile Ile
1 5 10 15
Ser Leu Lys Leu Phe Lys Ser Leu Tyr Pro Tyr Leu Leu Arg Ser Asn
20 25 30
Phe Lys Ile Ser Ile Leu Ile Ser Phe Thr Cys Lys
35 40

<210> 6725
<211> 48
<212> PRT
<213> S.epidermidis

<400> 6725
His Gly Tyr Phe Gln Gly Thr Arg Tyr Leu Leu Leu Gln Ser Val Asp
1 5 10 15
Thr His Thr Ser Ser Lys Glu Arg Phe Leu Ser Ser His Ser Gly Ala
20 25 30
Tyr Gln Leu Met Lys Cys Pro Leu Phe Gln His Asn Thr His Met Glu
35 40 45

<210> 6726
<211> 46
<212> PRT
<213> S.epidermidis

<400> 6726
Arg Leu Asp Ala Tyr Asn Ala Val Arg Phe His Arg Gln Pro Tyr Gly
1 5 10 15
Leu Thr Gly Ala Val Thr Arg Arg Ser Asp Val Asp Arg Pro Ala Asp
20 25 30
Glu Cys Trp Glu His Lys Cys Val Lys Gly Ala Pro Cys Ile
35 40 45

<210> 6727
<211> 48
<212> PRT
<213> S.epidermidis

<400> 6727
Lys Ile Tyr Leu Arg Ile Met Asn Leu Val Leu Ile Asn Val Lys Asp
1 5 10 15
His Gln Leu Phe Cys His Ile Ile Leu Arg Gly Leu Pro Tyr Glu Val
20 25 30
Ala Phe Tyr Leu Ser Pro Asn Ile Ala Leu Arg Leu Ile Ile His Ile
35 40 45

<210> 6728

Submitted by: 01/11/2011

<211> 371
 <212> PRT
 <213> S.epidermidis

<400> 6728

Glu	Glu	Leu	Ala	Met	Lys	Asp	Thr	Asp	Leu	Ala	Gln	Ile	Ala	Leu	Thr
1				5				10						15	
Gln	Asp	His	Thr	Gly	Ala	Ile	Ala	Asn	Pro	Ile	Tyr	Leu	Ser	Thr	Ala
			20					25					30		
Tyr	Gln	His	Pro	His	Leu	Gly	Glu	Ser	Thr	Gly	Tyr	Asp	Tyr	Thr	Arg
		35					40					45			
Thr	Lys	Asn	Pro	Thr	Arg	Thr	Ala	Phe	Glu	Glu	Ala	Phe	Ala	Gln	Leu
	50					55					60				
Glu	Lys	Gly	Ile	Ala	Ser	Phe	Ala	Thr	Ser	Ser	Gly	Met	Ala	Ala	Ile
65					70					75					80
Gln	Leu	Ile	Cys	Asn	Ile	Phe	Lys	Pro	Gly	Asp	Glu	Ile	Leu	Val	Ala
				85					90					95	
Phe	Asp	Leu	Tyr	Gly	Gly	Thr	Phe	Arg	Leu	Phe	Asp	Phe	Tyr	Glu	Lys
			100					105					110		
Gln	Tyr	Gly	Leu	Lys	Phe	Lys	Tyr	Val	Asp	Phe	Leu	Asn	Tyr	Glu	Glu
		115						120					125		
Val	Glu	Lys	Asn	Ile	Thr	Pro	Gln	Thr	Arg	Ala	Leu	Phe	Ile	Glu	Pro
	130						135					140			
Ile	Ser	Asn	Pro	Gln	Met	Ile	Glu	Ile	Asp	Val	Glu	Pro	Tyr	Tyr	Ile
145					150					155					160
Leu	Ser	Lys	Lys	His	Gln	Leu	Leu	Thr	Ile	Ile	Asp	Asn	Thr	Phe	Leu
				165					170					175	
Thr	Pro	Tyr	Leu	Ser	Thr	Pro	Leu	Glu	Gly	Ala	Asp	Ile	Val	Leu	
			180					185					190		
His	Ser	Ala	Thr	Lys	Tyr	Ile	Gly	Gly	His	Asn	Asp	Val	Leu	Ala	Gly
		195					200					205			
Val	Val	Thr	Val	Lys	Asp	Ala	Gln	Leu	Ala	Glu	Gln	Leu	Asn	Gln	Phe
		210				215						220			
His	Asn	Met	Ile	Gly	Ala	Thr	Leu	Ser	Pro	Leu	Asp	Ser	Tyr	Leu	Leu
225					230					235					240
Gln	Arg	Gly	Leu	Lys	Thr	Leu	His	Leu	Arg	Ile	Glu	Arg	Ser	Gln	Glu
				245					250					255	
Asn	Ala	Gln	Lys	Leu	Ala	Gln	Arg	Cys	Arg	Gln	Ser	Asp	Ser	Ile	Asp
			260					265					270		
Glu	Val	Leu	Tyr	Ser	Gly	Arg	Thr	Gly	Met	Leu	Ser	Leu	Arg	Leu	Asn
		275					280					285			
Gln	Ala	Tyr	Ser	Val	Ala	Lys	Phe	Leu	Glu	Asn	Leu	Glu	Ile	Cys	Ile
		290				295					300				
Phe	Ala	Glu	Ser	Leu	Gly	Gly	Thr	Glu	Thr	Phe	Ile	Thr	Phe	Pro	Tyr
305					310					315					320
Thr	Gln	Thr	His	Val	Asp	Met	Pro	Asp	Glu	Glu	Lys	Asp	Lys	Arg	Gly
				325					330					335	
Ile	Asp	Glu	Tyr	Leu	Ile	Arg	Leu	Ser	Val	Gly	Ile	Glu	Asp	Tyr	Asn
			340					345					350		
Asp	Ile	Glu	Ala	Asp	Ile	Ile	Gln	Ala	Leu	Glu	Asn	Ser	Lys	Val	Gly
		355					360					365			
Val	Ile	Ser													
		370													

<210> 6729
 <211> 169

His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Ile Leu
 50 55 60
 Tyr Arg Ile Trp Lys Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Ile Asp Glu Thr Tyr Ile Lys Ile Lys Gly Lys Trp Ser Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Met Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Gly
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys
 195 200 205
 Asn Arg Arg Ser Leu Gln Ile Tyr Gly Phe Ser Pro Cys His Glu Ile
 210 215 220
 Ser Ile Met Leu Ala Ser
 225 230

<210> 6732

<211> 230

<212> PRT

<213> S.epidermidis

<400> 6732

Gln Lys Gly Ala Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn
 1 5 10 15
 Lys Asp Val Ile Thr Val Ala Val Gly Tyr Tyr Leu Arg Tyr Ala Leu
 20 25 30
 Ser Tyr Arg Asp Ile Ser Glu Ile Leu Arg Glu Arg Gly Val Asn Val
 35 40 45
 His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Ile Leu
 50 55 60
 Tyr Arg Ile Trp Lys Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Ile Asp Glu Thr Tyr Ile Lys Ile Lys Gly Lys Trp Ser Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Met Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys

```
<210> 6733
<211> 101
<212> PRT
<213> S.epidermidis
```

```
<210> 6734
<211> 47
<212> PRT
<213> S.epidermidis
```

```
<210> 6735
<211> 42
<212> PRT
<213> S.epidermidis
```

<210>	6736
<211>	42
<212>	PRT

<213> S.epidermidis

<400> 6736

```

Ala Phe Phe Tyr Ala Phe Leu His Thr Thr Leu Tyr Leu His Phe Thr
1          5          10          15
Asn Leu Ser Asp Ser His Tyr Leu Leu Tyr Leu Thr Cys Asn Glu Asn
          20          25          30
Leu Ile Phe Leu Tyr Met Leu Ile Phe Leu
          35          40

```

<210> 6737

<211> 254

<212> PRT

<213> S.epidermidis

<400> 6737

```

Arg Tyr Leu Tyr Tyr Gly Gly Gly Arg Leu Leu Lys Ile Lys Arg Tyr
1          5          10          15
Ala Leu Leu Cys Leu Leu Gly Gly Leu Val Gly Gly Ile Ile Gly Tyr
          20          25          30
Ile Ile Gly Ala Ile Asn Trp Glu Lys Leu Phe Asn Tyr Ala Gln Phe
          35          40          45
Ala Asn Phe Lys Val Val Leu Tyr Thr Thr Ile Val Ala Ser Leu Ile
          50          55          60
Asn Val Ile Leu Thr Val Tyr Leu Phe Ile Val Gln Asn Ala Ser Leu
65          70          75          80
His Tyr Lys Ala Lys Ile Asp Ala Asn Ile Ser Asp Asp Leu Ala Asp
          85          90          95
Thr Tyr Glu Asn Lys Ser Tyr Ile Lys Ser Leu Lys Val Arg Phe Ile
          100          105          110
Tyr Thr Met Gln Leu Ile Val Ala Phe Ile Ala Ile Leu Ile Pro Val
          115          120          125
Ile Gly Asn Ser Ser Glu Asn His Ile Ala Leu Ile Met Ile Pro Phe
          130          135          140
Phe Ile Thr Ile Ile Ser Ser Ile Met Ile Gly Ile Phe Tyr Arg Lys
145          150          155          160
Phe Asp Ala Arg Tyr Pro Lys Leu Gly Glu Lys His Tyr Thr Glu Lys
          165          170          175
Ala Phe Asn Ile Met Asp Glu Gly Glu Arg Tyr Ile Thr Leu Val Ser
          180          185          190
Leu Tyr Lys Val His Gln Gln Asn Ile Val Leu Leu Phe Ile Gly Ile
          195          200          205
Met Met Leu Gly Ile Phe Ser Ile Thr Thr Gly Met Asn Gln Ser Leu
210          215          220
Gly Ile Ile Leu Phe Ile Ile Leu Phe Ile Tyr Asn Ser Leu Gly Tyr
225          230          235          240
Leu Leu Lys Val Ser Asn Phe Tyr Lys Ser Glu Gln Lys Ser
          245          250

```

<210> 6738

<211> 66

<212> PRT

<213> S.epidermidis

<400> 6738

```

Leu Thr Phe Leu Pro Leu Cys Phe Lys Leu Leu Ile Ser Ala Ile Lys

```


Gly Lys Trp Ser Tyr Leu Tyr Arg Ala Ile Asp Ala Glu Gly Tyr Thr
 20 25 30
 Leu Asp Ile Trp Leu Arg Lys Gln Arg Asp Asn His Ser Ala Tyr Ala
 35 40 45
 Phe Ile Lys Arg Leu Ile Lys Gln Phe Gly Lys Pro Gln Lys Val Ile
 50 55 60
 Thr Asp Gln Ala Pro Ser Thr Lys Val Ala Met Ala Lys Val Ile Lys
 65 70 75 80
 Ala Phe Lys Leu Lys Pro Asp Cys Tyr Cys Thr Ser Lys Tyr Leu Asn
 85 90 95
 Asn Leu Ile Glu Gln Asp His Cys His Ile Lys Ile Arg Lys Thr Arg
 100 105 110
 Tyr Gln Asn Ile Asn Thr Ala Lys Asn Thr Leu Lys Gly Ile Glu Cys
 115 120 125
 Ile Tyr Ala Leu Tyr Lys Lys Asn Arg Arg Ser Leu Gln Ile Tyr Gly
 130 135 140
 Phe Ser Pro Cys His Glu Ile Ser Ile Met Leu Ala Ser
 145 150 155

<210> 6742

<211> 400

<212> PRT

<213> S.epidermidis

<400> 6742

Lys Asp Asn Tyr Met Lys Lys His Ala Tyr Lys Gln Leu Leu Leu Gly
 1 5 10 15
 Met Ile Ala Met Leu Ile Val Met Ser Ile Ser Arg Phe Ala Tyr Thr
 20 25 30
 Pro Ile Leu Pro Phe Met Gln Gln Asp Thr Ser Met Asp Asn Gln Glu
 35 40 45
 Ala Gly Phe Leu Ala Thr Trp Asn Tyr Leu Gly Tyr Leu Val Gly Ala
 50 55 60
 Val Ile Pro Ile Phe Tyr Ile Tyr Lys Thr Lys Val Ile Asp Leu Lys
 65 70 75 80
 Ile Tyr Leu Ala Leu Asn Ile Ile Ser Thr Ile Leu Met Gly Phe Thr
 85 90 95
 Glu Gln Tyr Leu Ile Trp Ser Ile Phe Arg Leu Ile Ser Gly Ile Thr
 100 105 110
 Ser Gly Thr Val Phe Val Leu Thr Ser Asn Ile Val Leu Asp Ser Leu
 115 120 125
 Lys Lys Ile Gln Arg Glu Gly Ile Ser Gly Val Leu Tyr Ser Ala Val
 130 135 140
 Gly Leu Gly Ile Phe Leu Ser Ser Ile Tyr Leu Tyr Phe Phe Ala Ser
 145 150 155 160
 Val Asp Ser Trp Lys Met Val Trp Phe Val Leu Gly Ile Val Ser Leu
 165 170 175
 Val Leu Gly Leu Ile Val Leu Val Phe Met Lys Glu Asn Thr Asn Thr
 180 185 190
 Ile Ile Asn Phe Lys Glu Glu Lys Met Lys Ile Asn Asn Arg Leu Asn
 195 200 205
 Lys Lys Phe Val Ile Phe Phe Ser Ile Ala Tyr Phe Phe Glu Gly Ala
 210 215 220
 Gly Tyr Ile Ile Thr Gly Thr Phe Leu Val Ala Ile Val Lys Ser Ile
 225 230 235 240
 Pro Ser Val Ala Glu Tyr Ala Thr Leu Ser Trp Met Phe Val Gly Leu

<400> 6744

Phe Leu Ser Tyr Ile Lys Tyr Val Asn Leu Cys Ala Thr Ser Ser Ile
 1 5 10 15
 His Asp Glu Ser Ile Tyr Val Asp Ile Lys Met Ser Phe Tyr Gln Leu
 20 25 30
 Val Tyr Leu Trp Gly Tyr Thr Leu Lys Leu
 35 40

<210> 6745

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6745

Thr Pro Ser Tyr Thr Tyr Tyr Tyr Arg Asn Val Ser Cys Arg Phe Phe
 1 5 10 15
 Ile Asp Asn Asp Thr Lys Leu His Phe Leu Lys Lys Thr Gln His Phe
 20 25 30
 Ser Phe Asp Glu Arg Gln Leu Tyr Pro Gly Ser Tyr Pro Lys Thr Asp
 35 40 45
 Asn Tyr Val
 50

<210> 6746

<211> 57

<212> PRT

<213> S.epidermidis

<400> 6746

Leu Tyr Leu Tyr His Lys Leu Arg Tyr Leu Tyr Phe Ser Phe Val Pro
 1 5 10 15
 Leu Ile Lys Leu Ile Phe Tyr Leu Ile Ile Pro Val Phe Ala Pro Leu
 20 25 30
 Phe Phe Tyr Phe Ile Ser Leu Leu Val Cys Leu Glu Leu Cys Gln Glu
 35 40 45
 Ile Gly Gln Lys Ser Met Tyr Asn Glu
 50 55

<210> 6747

<211> 55

<212> PRT

<213> S.epidermidis

<400> 6747

Thr Ile Val Tyr Ile Ile Ile Thr Met Asn Ile Gly Asp Ile Glu Thr
 1 5 10 15
 Phe Pro Arg Ser Phe Ile Asn Ala Ser Ala Ala Asn Asn Ala Cys Asn
 20 25 30
 Lys Ala Met Arg Ser Gly Asn Pro Lys Leu Asn Ala Ile Phe Asn Ser
 35 40 45
 Lys Pro Leu Asp Ile Ser Val
 50 55

<210> 6748

<211> 399

<212> PRT

6744:6745:6746:6747:6748

Tyr Arg Lys Ile Thr Ala Leu Ile Asn Gln Cys Tyr Thr Ser Pro Ile
 85 90 95
 Asn His Lys Arg Val Gln Arg Met Met Gln Lys His His Leu Asn Cys
 100 105 110
 Arg Val Arg Pro Lys Lys Met Thr Lys Ile Gly Lys Pro Tyr Tyr Lys
 115 120 125
 Thr Asp Asn Leu Leu Gln Arg Gln Phe Lys Ala Ser Cys Pro Met Glu
 130 135 140
 Val Leu Thr Thr Asp Ile Thr Tyr Leu Pro Phe Gly His Ser Met Leu
 145 150 155 160
 Tyr Leu Ser Ser Ile Met Asp Ile Tyr Asn Gly Glu Ile Val Ala Tyr
 165 170 175
 Lys Ile Asp Asp Lys Gln Asp Gln Ser Leu Val Asn Asp Thr Leu Asn
 180 185 190
 Gln Ile Asp Ile Pro Glu Gly Cys Ile Leu His Ser Asp Gln Gly Ser
 195 200 205
 Val Tyr Thr Ser Tyr Ala Tyr Tyr Gln Leu Cys Glu Glu Lys Gly Ile
 210 215 220
 Ile Arg Ser Met Ser Arg Lys Gly Thr Pro Ala Asp Asn Ala Pro Ile
 225 230 235 240
 Glu Ser Phe His Ser Ser Leu Lys Ser Glu Thr Phe Tyr Ile Asn Asn
 245 250 255
 Glu Leu Asn His Ser Asn His Ile Val Ile Asp Ile Val Glu Lys Tyr
 260 265 270
 Ile Lys Asn Asn Asn Asn Asn Asn Asn Arg Ile Gln Gln Lys Leu
 275 280 285
 Gly Tyr Leu Ser Pro Val Lys Tyr Arg Glu Leu Ile Ala
 290 295 300

<210> 6752

<211> 563

<212> PRT

<213> S.epidermidis

<400> 6752

Lys Glu Arg Tyr Asp Met Lys Gly Lys Ile Ala Leu Tyr Ser Arg Val
 1 5 10 15
 Ser Thr Ser Glu Gln Ser Glu His Gly Tyr Ser Val Lys Glu Gln Glu
 20 25 30
 Gln Val Leu Ile Lys Glu Val Val Lys Asn Phe Pro Gly Tyr Asp Tyr
 35 40 45
 Glu Thr Tyr Thr Asp Ser Gly Ile Ser Gly Lys Asn Ile Glu Asp Arg
 50 55 60
 Pro Ala Met Lys Arg Leu Leu Gln Asp Val Lys Asp Asn Lys Ile Glu
 65 70 75 80
 Met Val Leu Ser Trp Lys Leu Asn Arg Ile Ser Arg Ser Met Arg Asp
 85 90 95
 Val Phe Asn Ile Ile His Glu Phe Lys Glu His Asp Val Gly Tyr Lys
 100 105 110
 Ser Ile Ser Glu Asn Ile Asp Thr Ser Asn Ala Ser Gly Glu Val Leu
 115 120 125
 Val Thr Met Phe Gly Leu Ile Gly Ser Ile Glu Arg Gln Thr Leu Ile
 130 135 140
 Ser Asn Val Lys Leu Ser Met Asn Ala Lys Ala Arg Ser Gly Glu Ala
 145 150 155 160
 Ile Thr Gly Arg Val Leu Gly Tyr Lys Leu Ser Leu Asn Pro Leu Thr

165 170 175
 Gln Lys Asn Asp Leu Val Ile Asp Glu Asn Glu Ala His Ile Val Arg
 180 185 190
 Glu Ile Phe Asp Leu Tyr Leu Asn His Asn Lys Gly Leu Lys Ala Ile
 195 200 205
 Thr Thr Val Leu Asn Gln Lys Gly Tyr Arg Thr Ile Asn Gln Lys Pro
 210 215 220
 Phe Ser Val Tyr Gly Val Lys Tyr Ile Leu Asn Asn Pro Val Tyr Lys
 225 230 235 240
 Gly Tyr Val Arg Phe Asn Asn His Gln Asn Trp Ala Val Gln Arg Arg
 245 250 255
 Ser Gly Lys Ser Asp Lys Asn Asp Val Ile Leu Val Lys Gly Lys His
 260 265 270
 Glu Ala Ile Ile Ser Glu Asp Val Phe Asp Gln Val His Glu Lys Leu
 275 280 285
 Ala Ser Lys Ser Phe Lys Pro Gly Arg Pro Ile Gly Gly Asp Phe Tyr
 290 295 300
 Leu Arg Gly Leu Ile Lys Cys Pro Glu Cys Gly Asn Asn Met Val Cys
 305 310 315 320
 Arg Arg Thr Tyr Tyr Lys Thr Lys Lys Ser Lys Glu Arg Thr Ile Lys
 325 330 335
 Arg Tyr Tyr Ile Cys Ser Leu Phe Asn Arg Ser Gly Ser Ser Ala Cys
 340 345 350
 His Ser Asn Ser Ile Asn Ala Glu Val Val Glu Arg Val Ile Asn Val
 355 360 365
 His Leu Asn Arg Ile Leu Ser Gln Pro Asp Ile Ile Lys Gln Ile Ala
 370 375 380
 Ser Asn Val Ile Glu Glu Leu Lys Gln Lys His Ser Asn Gln Thr Glu
 385 390 395 400
 Ile Lys Tyr Asp Ile Asp Ser Leu Glu Lys Gln Lys Ala Lys Leu Lys
 405 410 415
 Arg Gln Gln Glu Arg Leu Leu Glu Leu Phe Leu Asp Asp Gln Met Asp
 420 425 430
 Ser Gly Met Leu Lys Ala Lys Gln Ser Glu Met Asn Gln Gln Leu Glu
 435 440 445
 Val Leu Asp Gln Gln Ile Lys Glu Ala Lys Gln Ala Asn Gln Ser Gln
 450 455 460
 Asp Glu Ile Pro Asn Phe Asp Lys Leu Lys Gly Arg Leu Ile Leu Met
 465 470 475 480
 Ile Thr Arg Phe Ser Val Tyr Leu Arg Lys Ala Thr Pro Glu Ala Lys
 485 490 495
 Asn Gln Leu Met Lys Met Leu Ile Asp Ser Ile Glu Ile Thr Thr Asp
 500 505 510
 Lys Gln Val Lys Leu Val Arg Tyr Lys Ile Asp Glu Ser Leu Ile Pro
 515 520 525
 Gln Ser Leu Lys Lys Asp Trp Gly Ser Phe Phe Met Pro Lys Phe Gln
 530 535 540
 Phe Glu Ile Tyr Gly Gln Asn Asp Tyr Phe Ile Asp Gln Ile Thr Thr
 545 550 555 560
 Phe Thr Thr

<210> 6753

<211> 62

<212> PRT

<213> S.epidermidis

<210> 6755
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6755
 Phe Ile His Leu Glu Ser Phe Ser Arg Leu Lys Leu Ser Val Ile Gly
 1 5 10 15
 Asp Ile Lys Lys Met Ile Ala Arg Lys Leu Phe Ile Val Gly Phe Lys
 20 25 30
 Asn Glu Lys Thr Thr Ala Ala Ile Ile Pro Thr Thr Lys
 35 40 45

<210> 6756
 <211> 690
 <212> PRT
 <213> S.epidermidis

<400> 6756
 Gly Lys Asn Leu Ile Glu Val Ile Ser Leu Thr Asn Asn Asn Arg Ile
 1 5 10 15
 Lys Arg Phe Ser Ile Arg Lys Tyr Ala Val Gly Val Val Ser Ile Ile
 20 25 30
 Thr Gly Val Thr Ile Phe Ile Gly Gly Gln Gln Ala Gln Ala Ala Glu
 35 40 45
 Thr Ser Val Gln His Ala Asp Ala His Pro Glu Asp Ser Gln Thr Thr
 50 55 60
 Gln Gln Leu Lys Asn Asp Lys Val Glu Glu Thr Leu Lys Ala Ser Lys
 65 70 75 80
 Gln Gly Asn Ala Asp Ser Gln Gln Val Gln Thr Ile Asp Gln Ser Lys
 85 90 95
 Thr Asn Gln Asn Asn Gln His Ser Val Ala Glu Ser Ala Gln Leu Lys
 100 105 110
 Ser Asp Glu Thr Ala Asn Gln Pro Lys Lys Glu Glu Ser Ser Ser Val
 115 120 125
 Lys Gln Asp Val Gln Pro Ser Lys Asn Val Asn Gln Gln Asp Ala Ala
 130 135 140
 Thr Gln Ser Asn Glu Arg Glu Asn Asn Asp Ile Lys Gly Glu Gly Gln
 145 150 155 160
 Thr Ser Lys Thr Ser Asn Gln His Ile Gln Ser Ser Asn Ser His Asn
 165 170 175
 Gln Ser Thr Gly Thr Lys Asp Ser Asp Ser Glu Glu Ile Asp Gln Pro
 180 185 190
 Leu Val Lys Leu Gln Lys Pro Ser Asn Asp Ser Thr Tyr Gln Thr Gln
 195 200 205
 Ser Lys Thr Lys Gln Asp Ser Ser Lys Gln Leu Pro Gln Glu Lys Thr
 210 215 220
 Thr Lys Arg Gln Ile Gln Thr Thr Glu Asn Glu Gln Thr Thr Lys Val
 225 230 235 240
 Asp Ser Lys Lys Ala Asn Asp Thr Gln Asn Val Glu Lys His Thr Gln
 245 250 255
 Glu Pro Lys Asn Asp Thr Ser Thr Ser Gln Lys Asn His His Gln Val
 260 265 270
 Ala Thr Lys Glu Gln Ser Asn Arg Ser Thr Thr Arg Lys Thr Gln Lys
 275 280 285
 Gln Ser Ser Asn Ala Asn Gln Asn His Gln Phe Thr His Gln Ala Gln

```

      290                      295                      300
Phe Lys Asn Gln Tyr Pro Val Val Phe Val His Gly Phe Leu Gly Phe
305                      310                      315                      320
Ala Gly Asp Asn Gln Phe Ser Leu Ala Pro Lys Tyr Trp Gly Gly Thr
      325                      330                      335
Lys Tyr Asn Ile Asp Arg Asn Leu Thr Asn Glu Gly Tyr Asn Val His
      340                      345                      350
Glu Ala Asn Ile Gly Ala Phe Ser Ser Asn Tyr Asp Arg Ala Val Glu
      355                      360                      365
Leu Tyr Tyr Tyr Val Lys Gly Gly Arg Val Asp Tyr Gly Ala Ala His
      370                      375                      380
Ala Ala Lys Tyr Gly His His Arg Tyr Gly Arg Thr Tyr Lys Gly Ile
385                      390                      395                      400
Met Arg Asp Trp Glu Pro Gly Lys Lys Ile His Phe Ile Gly His Ser
      405                      410                      415
Met Gly Gly Gln Thr Ile Arg Gln Met Glu Glu Phe Leu Arg Asn Gly
      420                      425                      430
Asn Gln Glu Glu Ile Glu Tyr Gln Arg Gln His Gly Gly Thr Ile Ser
      435                      440                      445
Asp Leu Phe Thr Gly Gly Lys Asp Asn Met Val Ala Ser Ile Thr Thr
      450                      455                      460
Leu Gly Thr Pro His Asn Gly Thr Pro Ala Ala Asp Lys Ile Gly Thr
465                      470                      475                      480
Arg Lys Leu Val Lys Glu Thr Ile Asn Arg Ile Gly Arg Leu Ser Gly
      485                      490                      495
Gly Lys Asp Val Asp Ile Asp Leu Gly Phe Ser Gln Trp Gly Leu Lys
      500                      505                      510
Gln Gln Pro Asn Glu Ser Tyr Ile Asp Tyr Ala Glu Arg Val Ser Lys
      515                      520                      525
Ser Lys Ile Trp Asn Thr Glu Asp Gln Ala Val Asn Asp Leu Thr Thr
      530                      535                      540
Gln Gly Ala Glu Lys Ile Asn Gln Gln Thr Ser Leu Asn Pro Asn Ile
545                      550                      555                      560
Val Tyr Thr Thr Tyr Thr Gly Ser Ala Thr His Thr Gly Pro Leu Gly
      565                      570                      575
Asn Glu Leu Pro Asn Ser Ser Glu Ile Leu Leu Leu Asn Leu Thr Ser
      580                      585                      590
Arg Ile Ile Gly Lys Asp Val Asn Lys Glu Ile Arg Pro Asn Asp Gly
      595                      600                      605
Val Val Pro Val Ile Ser Ser Gln His Pro Ser Asn Gln Ala Phe Lys
      610                      615                      620
Lys Val Asp Asp His Thr Pro Ala Thr Asp Lys Gly Val Trp Gln Val
625                      630                      635                      640
Arg Pro Val Gln His Asp Trp Asp His Leu Asp Leu Val Gly Met Asp
      645                      650                      655
Ala Phe Asp Leu Thr His Thr Gly Arg Glu Leu Gly Gln Phe Tyr Leu
      660                      665                      670
Gly Ile Met Asp Asn Ile Met Arg Ile Glu Glu Ala Asp Gly Ile Thr
      675                      680                      685
Asn Lys
690

```

<210> 6757

<211> 298

<212> PRT

<213> S.epidermidis

<400> 6757

Leu Ile Leu His Phe Ser Tyr Asn Asn Ile Lys Ile Ile Phe His Ile
 1 5 10 15
 Ile Ala Leu Asn Ile Lys Phe Ile Ile Lys Glu Ser Phe Met Leu Lys
 20 25 30
 Lys Phe Ser Tyr Ser Ile Ile Ser Leu Ser Ile Phe Ala Thr Ser Leu
 35 40 45
 Asn Phe Ile Asp Thr Gln Ala Gln Ala Ser Ser Ser Val Ser Glu
 50 55 60
 Lys Gly Thr Met Gly Tyr Gly Tyr Gln Gln Tyr Leu Lys Asp His Pro
 65 70 75 80
 Lys Lys Gln Thr His Lys Thr Gln Asn Arg Ser Thr Phe Ser Ala Glu
 85 90 95
 Ser Asn Ile Thr Glu Thr Asn Asn Gly Glu Arg Val Leu Asp Ile Ser
 100 105 110
 Glu Trp Gln Gly Leu Leu Thr Asn Glu Gln Ile Lys Gln Leu Lys Lys
 115 120 125
 Asn Tyr Asp Phe Ile Ile Leu Arg Ala Gln Tyr Gly Ser Glu Tyr Val
 130 135 140
 Asp Lys Thr Phe Glu Lys Asn Ala Glu Leu Leu Glu Gln Asn Lys Met
 145 150 155 160
 Lys Tyr Gly Val Tyr Ser Tyr Ser Met Tyr Glu Ser Pro Lys Asp Ala
 165 170 175
 Arg Tyr Glu Ala Lys Thr Leu Ser Gln Arg Ala Pro Lys Ala Ala Phe
 180 185 190
 Tyr Ile Asn Asp Tyr Glu Glu Gln Thr Val Lys Ser Gly Asp Asp Glu
 195 200 205
 Thr Ala Thr Gln Ala Trp Ala Asn Glu Met Arg Lys Leu Ala Gly Asn
 210 215 220
 Lys Lys Ile Leu Phe Tyr Ser Tyr Glu Asn Phe Met Leu Asn His Ala
 225 230 235 240
 Ser Asn Ala Val Ser Ser Tyr Asp Gly Tyr Trp Leu Ala Ala Tyr Gln
 245 250 255
 Ala Glu Glu Pro Lys Arg Glu Lys Val Leu Trp Gln Tyr Thr Asp Ser
 260 265 270
 Tyr Tyr Ser Pro Glu Leu Asn Gln Asn Val Asp Ala Asn Tyr Ile Asp
 275 280 285
 Glu Asn Val Asn Ser Ser Trp Phe Thr Ser
 290 295

<210> 6758

<211> 117

<212> PRT

<213> S.epidermidis

<400> 6758

Val Leu Ile Gln Ile Leu Lys Asn Val Leu Ser Ile Leu His Phe Met
 1 5 10 15
 Ile Gln Cys Leu Asn Leu Ile Glu Thr Ser Val Leu Leu Arg Ile Leu
 20 25 30
 Tyr Val Val Tyr Arg Ala Ser His Glu Thr Ala Lys Glu Ala Leu Gly
 35 40 45
 Asp Lys Glu Leu Arg Ala Ile Ala His Glu Leu Thr Lys Thr Val Lys
 50 55 60
 Asp Asn Met Ser Val Asp Trp Ser Lys Arg Asp Ser Ala Lys Ala Lys

Ile Gln Asn Gln Asp Val Val Ile Leu Asn Glu Leu Phe Asp Lys Lys
 85 90 95
 Ala Ser Asn Arg Leu Leu Thr Arg Leu His Ser Gln Tyr Pro Tyr Gln
 100 105 110
 Thr Pro Ile Val Gly Lys Gly Thr Glu Gly Trp Gln Asn Thr Ser Gly
 115 120 125
 Thr Tyr Arg Lys Ile Lys Lys Val Ser Gly Gly Val Gly Ile Val Ser
 130 135 140
 Lys Trp Pro Ile Val Gln Gln Glu Gln His Ile Tyr Lys Lys Gly Cys
 145 150 155 160
 Gly Ala Asp Met Ala Gly Asn Lys Gly Phe Ala Tyr Ile Lys Ile Asn
 165 170 175
 Lys Asn Gly Lys Tyr His His Ile Ile Gly Thr His Leu Gln Ala Glu
 180 185 190
 Asp Pro Thr Cys Phe Lys Gly Lys Asp Lys Asp Ile Arg Gln Ser Gln
 195 200 205
 Met Asn Glu Ile Lys Gln Phe Ile Lys Asp Lys Asn Ile Pro Lys Asn
 210 215 220
 Glu Pro Val Tyr Ile Gly Gly Asp Leu Asn Val Ile Lys Asp Ser Asp
 225 230 235 240
 Glu Tyr Gln Gln Met Ala Asn Asn Leu Asn Val Ser Leu Pro Thr Gln
 245 250 255
 Phe Asp Gly Asn Ala Tyr Ser Trp Asp Thr Ser Ser Asn Ser Ile Ala
 260 265 270
 Lys Tyr Asn Tyr Pro Lys Leu Glu Pro Gln His Leu Asp Tyr Ile Leu
 275 280 285
 Leu Asp Arg Asp His Ala Gln Pro Ser Ser Trp His Asn Asp Thr His
 290 295 300
 Arg Val Lys Ser Pro Glu Trp Ser Val Lys Ser Trp Gly Lys Thr Tyr
 305 310 315 320
 Lys Tyr Asn Asp Tyr Ser Asp His Tyr Pro Leu Ser Gly Tyr Ala Ser
 325 330 335
 Asn Glu

<210> 6762

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6762

Ile Cys Arg His Phe Ser Ile Thr Thr Pro Asn Asn Ala Ala Thr Ile
 1 5 10 15
 Ala Ala Ile Lys Ile Ala Thr Tyr Glu Gly Arg Ile Glu Leu Arg Arg
 20 25 30
 Ser Ile Ile Thr Ile Thr His Thr Met Ser Thr Ile Tyr Ile Leu Asn
 35 40 45
 Arg Asp Phe Leu Ile Pro Ser Asn
 50 55

<210> 6763

<211> 59

<212> PRT

<213> S.epidermidis

<400> 6763


```
<210> 6765
<211> 614
<212> PRT
<213> S.epidermidis
```

<400>	6765														
Arg	Glu	Arg	Leu	Met	Lys	Trp	Leu	Lys	Gln	Leu	Gln	Ser	Leu	His	Thr
1				5					10					15	
Lys	Leu	Val	Ile	Val	Tyr	Val	Leu	Leu	Ile	Ile	Ile	Gly	Met	Gln	Ile
			20					25					30		
Ile	Gly	Leu	Tyr	Phe	Thr	Asn	Ser	Leu	Glu	Lys	Glu	Leu	Leu	Asp	Asn
		35					40					45			
Phe	Lys	Lys	Asn	Ile	Thr	Gln	Tyr	Ala	Lys	Gln	Leu	Asp	Val	Asn	Ile
	50					55					60				
Glu	Lys	Val	Tyr	Lys	Asp	Lys	Asp	Lys	Gly	Ser	Val	Asn	Ala	Gln	Lys
65					70					75				80	
Asp	Ile	Gln	Asp	Leu	Leu	Asn	Glu	Tyr	Ala	Asn	Arg	Gln	Glu	Ile	Gly
				85					90					95	
Glu	Ile	Arg	Phe	Ile	Asp	Lys	Asp	Gln	Ile	Ile	Met	Ala	Thr	Thr	Lys
			100					105					110		
Gln	Ser	Asn	Arg	Gly	Leu	Ile	Asn	Gln	Lys	Val	Asn	Asp	Gly	Ser	Val
		115					120					125			
Gln	Lys	Ala	Leu	Ser	Leu	Gly	Gln	Thr	Asn	Asp	His	Met	Val	Leu	Lys
	130					135					140				
Asp	Tyr	Gly	Ser	Gly	Lys	Glu	Arg	Val	Trp	Val	Tyr	Asn	Ile	Pro	Val
145					150					155				160	
Lys	Val	Asp	Lys	Gln	Thr	Ile	Gly	Asp	Ile	Tyr	Ile	Glu	Ser	Lys	Ile
			165						170					175	
Asn	Asp	Val	Tyr	Asn	Gln	Leu	Asn	Asn	Ile	Asn	Gln	Ile	Phe	Ile	Val
			180					185					190		
Gly	Thr	Ala	Ile	Ser	Leu	Phe	Ile	Thr	Val	Ile	Leu	Gly	Phe	Phe	Ile
		195					200					205			
Ala	Arg	Thr	Ile	Thr	Lys	Pro	Ile	Thr	Asp	Met	Arg	Asn	Gln	Thr	Val
	210					215					220				

<400> 6766

Thr Leu Leu Gln Lys Ala Asp Arg Thr Glu Ala Ile Ser Ser Gly Val
 1 5 10 15
 Thr Ile Glu Thr Thr Ala Val Glu Gly Ser Thr Leu Thr Thr Arg Ser
 20 25 30
 Gly Ser Thr Val Asn Arg Thr Asp Leu Pro Val Pro
 35 40

<210> 6767

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6767

Met Ser Leu His Leu Arg Leu Arg Val Trp Phe Cys Ile Leu Asp Leu
 1 5 10 15
 Ser Leu Asp Asp Leu Leu Ile Gln Leu Asp Leu Thr Phe Lys Arg Pro
 20 25 30
 His Val Asn Tyr Tyr Leu Ser Trp Ser Ser Arg Ile Thr Met
 35 40 45

<210> 6768

<211> 106

<212> PRT

<213> S.epidermidis

<400> 6768

Lys Arg Thr His Phe Glu Ile Asn Val Ser Leu Lys Ile Val Thr Phe
 1 5 10 15
 Tyr Tyr Phe Leu Ile Ser Ile Gly Ser Pro Asn Ser Phe Ser Ile Ile
 20 25 30
 Cys Glu Ile Ser Phe Pro Asn Gly Pro Leu Ile Thr Ser Val Arg Leu
 35 40 45
 Ala Thr Glu Val Ser Ile Pro Asn Thr Ala Pro Met Ala Asn Ile Leu
 50 55 60
 Pro Pro Glu Val Lys Ala Ile Ser His Pro Asn Ala Thr Phe Pro Ile
 65 70 75 80
 Cys Leu Lys Gly Phe Leu Ser Asn Ile Thr Val Arg Pro Met Ile Leu
 85 90 95
 Gly Val Phe Val Ser Pro Ile Ile Ile Lys
 100 105

<210> 6769

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6769

Asn Leu Glu Gln Leu Glu Thr Glu Leu Phe Asp Tyr Val Asn Trp Tyr
 1 5 10 15
 Asn Asn Phe Arg Pro His Ser Ser Leu Gln Tyr Leu Thr Pro Met Ala
 20 25 30
 Tyr Lys Asp Ile His Met Lys Ser Val
 35 40

<210> 6770

<211> 76
 <212> PRT
 <213> S.epidermidis

<400> 6770

Glu	Leu	Arg	His	Ile	Leu	Tyr	Met	Asn	Glu	Leu	Ile	Leu	Leu	Leu	Gly
1				5					10					15	
Asp	Ser	Ile	Thr	Thr	Asn	Ser	Asp	Glu	Ala	Thr	Phe	Asn	Phe	Leu	Leu
			20					25					30		
Ser	Ile	Thr	Gly	Asn	Gln	Ile	Leu	Leu	Val	Ser	Gly	Phe	Ile	Phe	Glu
		35					40					45			
Asn	Asn	Thr	Gln	Leu	Leu	Leu	Ile	Ile	His	Leu	Leu	Leu	Phe	Ile	Leu
		50				55					60				
Leu	Thr	Ser	Ser	Ser	Ile	Ala	Cys	Ser	Ser	Leu	Ser				
65					70					75					

<210> 6771
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 6771

Leu	Glu	Leu	Gln	His	Gln	Ser	Lys	Lys	Gln	Leu	Lys	Met	Glu	Asn	Ala
1				5					10					15	
Gly	Met	Asp	Ile	Val	Val	Ala	Gln	Gly	Tyr	Glu	Ala	Gly	Gly	His	Arg
			20					25					30		
Gly	Ser	Phe	Thr	Thr	Ile	Asn	Gly	Glu	Phe	Pro	Leu	Val	Gly	Thr	Leu
		35					40					45			
Ser	Leu	Val	Thr	Thr	Asn	Cys									
		50				55									

<210> 6772
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6772

Lys	Met	Trp	His	Ile	Asn	Leu	His	Ile	Leu	Tyr	Asn	Leu	Arg	Thr	Lys
1				5					10					15	
Arg	His	Ile	Glu	Ile	Glu	Glu	Leu	Thr	Thr	Gln	Leu	Asn	Lys	Lys	Asn
			20					25					30		
Gly	Thr	His	Asn	Lys	Pro	Leu	Gln	Ile	Trp	Glu	Trp				
		35					40								

<210> 6773
 <211> 468
 <212> PRT
 <213> S.epidermidis

<400> 6773

Ile	Gly	Trp	Gln	Arg	Val	Asp	His	Val	Pro	Cys	Leu	Gly	Cys	Gly	Leu
1				5					10					15	
Phe	Leu	Leu	Phe	Tyr	His	Thr	Lys	Ser	Ser	Ile	Lys	Leu	Asn	Ile	Phe
			20					25					30		
Tyr	Leu	Gly	Lys	Asp	Glu	Gly	Tyr	Met	Leu	Asp	Ile	Arg	Leu	Phe	Arg
		35					40					45			

6770-6773: S.epidermidis

<211> 237
 <212> PRT
 <213> S.epidermidis

<400> 6774

Val	Ile	Phe	Lys	Gly	Phe	Ile	Val	Met	Tyr	Glu	Glu	Asn	Ile	Tyr	Ile
1				5					10					15	
Lys	Asn	Ser	Glu	Tyr	Glu	Phe	Asp	Asn	Asn	Leu	Lys	Gln	Leu	Ala	Ser
			20					25					30		
Tyr	Leu	Asn	Ile	Pro	Val	Ser	Ile	Val	Arg	Pro	Tyr	Lys	Glu	Asp	Leu
		35					40					45			
Thr	Leu	Tyr	Gln	Tyr	Lys	Lys	Gly	Gln	Val	Ile	Tyr	His	Ser	Thr	Asp
		50				55					60				
Gln	Ile	Lys	Phe	Val	Tyr	Phe	Leu	Val	Asn	Gly	Cys	Ile	Leu	His	Glu
65					70					75				80	
Ser	Ser	Asn	Ile	Thr	Gly	Asp	Asn	Tyr	Leu	Arg	Leu	Ser	Lys	Asp	Glu
				85					90					95	
Asn	Ile	Phe	Pro	Met	Asn	Phe	Ile	Phe	Asn	Glu	Thr	Pro	Ala	Pro	Tyr
			100					105					110		
Glu	Ile	Cys	Thr	Ala	Leu	Thr	Asp	Cys	Lys	Ile	Leu	Thr	Leu	Pro	Lys
		115					120					125			
Asp	Leu	Leu	Glu	Tyr	Leu	Cys	Arg	Lys	His	Asn	Glu	Ile	Phe	Glu	Ser
		130				135					140				
Leu	Phe	Lys	Lys	Leu	Asn	Glu	Thr	Ile	Gln	Phe	Gln	Val	Glu	Tyr	Ile
145					150					155				160	
Met	Ala	Leu	Arg	Ala	Asn	Ser	Ala	Lys	Glu	Arg	Ile	Glu	Arg	Ile	Leu
				165					170					175	
Gln	Ile	Leu	Cys	Leu	Ser	Ile	Gly	Asp	Asn	Gly	Glu	Phe	Tyr	Glu	
		180						185					190		
Leu	Lys	Gln	Ile	Met	Thr	Val	Gln	Leu	Ile	Ser	Asn	Leu	Ser	Gly	Leu
		195					200					205			
Asn	Arg	Lys	Thr	Thr	Gly	Glu	Ile	Ile	Arg	Glu	Leu	Lys	Ile	Glu	Asn
		210				215					220				
Ile	Ile	Tyr	Gln	Asp	Lys	Arg	Asn	Trp	Ile	Ile	Lys	Lys			
225					230					235					

<210> 6775
 <211> 84
 <212> PRT
 <213> S.epidermidis

<400> 6775

Leu	Pro	Phe	Asn	Ser	Leu	Ile	Thr	Ile	Gly	Phe	Val	Ser	Phe	Leu	Ala
1				5					10					15	
Asp	Phe	Ile	Leu	Phe	Ser	Phe	Gln	Cys	Ile	Ser	Ser	Pro	Leu	Tyr	Cys
			20					25					30		
Leu	Tyr	Ile	Leu	Asp	Glu	Thr	Thr	Phe	Ser	Ser	Tyr	Ser	Ile	Phe	His
		35					40					45			
Tyr	Leu	Asn	Ala	Ile	Phe	Ala	Asn	Ala	Phe	Ile	Arg	Asn	Phe	Phe	Leu
		50				55					60				
Lys	Leu	Thr	Ile	Ser	Ile	Leu	Ile	Glu	Phe	Val	Gln	Leu	Ser	Val	Asp
65					70					75				80	
Asp	Ser	Phe	Thr												

<210> 6776

<211> 85
 <212> PRT
 <213> S.epidermidis

<400> 6776

Leu	His	Phe	Lys	Gly	Ile	Asn	Ala	Ile	Asn	Leu	Ser	Ser	Asn	Cys	Ser
1				5					10					15	
Ile	Leu	Glu	Leu	Tyr	Cys	Cys	Asn	Leu	Ile	Val	Ile	Ile	Tyr	Ile	Leu
		20						25					30		
Val	Tyr	Lys	Ala	Ile	Val	Gln	His	Tyr	Arg	Lys	Leu	Thr	Thr	Phe	Tyr
		35					40					45			
Trp	Arg	Tyr	Tyr	Ile	Leu	Asn	Gln	Phe	Gln	Asn	Lys	Leu	Tyr	Thr	Thr
	50					55					60				
Tyr	Phe	Leu	Val	Leu	Phe	Val	Ile	Arg	Phe	Cys	Val	Ser	Val	Lys	Ser
65					70					75					80
Ala	Val	Phe	Tyr	Asn											
				85											

<210> 6777
 <211> 164
 <212> PRT
 <213> S.epidermidis

<400> 6777

Gly	Asp	Phe	Asn	Met	Val	Lys	Lys	Asp	Lys	Asp	Thr	Asn	Asp	Gln	Lys
1				5					10					15	
Ser	Glu	Ser	His	Met	Lys	His	Asn	Asp	Glu	Ser	Lys	Val	Pro	Glu	Asp
		20						25					30		
Met	Thr	Ser	Thr	Asn	Glu	Gly	Glu	Phe	Lys	Val	Gly	Asp	Lys	Val	Thr
		35					40					45			
Ile	Thr	Ala	Gly	His	Met	Pro	Gly	Met	Lys	Gly	Ala	Glu	Ala	Thr	Val
	50					55					60				
Lys	Gly	Ala	Tyr	Lys	Thr	Tyr	Ala	Tyr	Val	Val	Ser	Tyr	Lys	Pro	Thr
65					70					75					80
Asn	Gly	Asn	Glu	Lys	Val	Asn	Asn	His	Lys	Trp	Val	Val	Asn	Glu	Glu
				85					90					95	
Ile	Lys	Asp	Ala	Pro	Lys	Asp	Gly	Phe	Ser	Lys	Gly	Asp	Thr	Val	Lys
			100					105					110		
Leu	Glu	Ala	Asn	His	Met	Ser	Gly	Met	Lys	Gly	Ala	Thr	Ala	Ile	Ile
		115					120					125			
Asp	Asn	Val	Lys	Lys	Thr	Thr	Val	Tyr	Val	Val	Asp	Tyr	Lys	Ser	Lys
	130					135					140				
Asp	Asn	Gly	Lys	Ile	Ile	Lys	Asn	His	Lys	Trp	Met	Thr	Gly	Asn	Glu
145					150					155					160
Leu	Lys	Ala	Arg												

<210> 6778
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6778

Phe	Tyr	Phe	Leu	Thr	Thr	Asn	Asp	Cys	Ile	Ile	Ser	Asn	Tyr	His	Cys
1				5					10					15	
Ser	Met	Leu	Thr	Asn	Leu	Ser	Pro	Asn	Phe	Gln	Phe	Tyr	Tyr	Gln	Lys

<212> PRT

<213> S.epidermidis

<400> 6783

```

Ile Thr Pro Lys Pro Pro Cys Arg Ala Ile Ala Ile Ala Ile Phe Asp
1          5          10          15
Ser Val Thr Val Ser Ile Pro Ala Glu Ile Thr Gly Met Phe Asn Leu
          20          25          30
Ile Leu Ser Asp Asn Leu Thr Leu Lys Ser Thr Ser Leu Gly Lys Thr
          35          40          45
Ser Asp Ala Ala Gly Met Ser Asn Thr Ser Ser Asn Val Lys Asp Ser
          50          55          60
Leu Ala Asn Leu Phe Ser His Ile Lys Asn Ser Leu Gln Phe Tyr Leu
65          70          75          80
Tyr Leu Val Thr Leu Phe His Ile Phe Phe Ser Leu Phe Ile Leu Tyr
          85          90          95
Thr Ile Lys Lys Glu Ile
          100

```

<210> 6784

<211> 107

<212> PRT

<213> S.epidermidis

<400> 6784

```

Met Met Thr Asn Val Gln Arg Met Ile Gln Met Asn Lys Lys Ser Leu
1          5          10          15
His Phe Leu Leu Lys Arg Lys Val Leu Gly Ile Ala Phe Asn Leu
          20          25          30
Pro Glu Gly Glu Glu Phe Thr Phe His Asp Leu Asn Ser Arg Ala Asn
          35          40          45
Val Thr Cys Ser Lys Glu Val Gln Gln Asn Val Gly Arg Trp Phe Ala
          50          55          60
Tyr Phe Val Lys His Ala Pro Arg Val Pro Phe Ile Ile Ile Gly Lys
65          70          75          80
Asp Thr His Gly His Leu Val Tyr Leu Lys Thr Gly Pro Asn Pro His
          85          90          95
His Asn Ser Asn Pro Ser Lys Gly Gly Val Arg
          100          105

```

<210> 6785

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6785

```

Phe Ala Ala Asn Ala Pro Ala Leu Val Ile Ala Leu Asn Arg Val Asp
1          5          10          15
Leu Pro Thr Leu Gly Lys Pro Thr Ile Pro Ala Val Lys Ala Ile Ile
          20          25          30
His Ser Pro Asn Phe Leu Cys Leu Asp Glu Ile Gln Glu Leu Phe Ser
          35          40          45
Phe Ser Tyr
          50

```

<210> 6786

<211> 71
 <212> PRT
 <213> S.epidermidis

<400> 6786

Val	Tyr	Cys	Leu	Pro	Thr	Cys	Cys	Glu	Asn	Leu	Tyr	Ala	Ser	Phe	Gly
1				5				10						15	
Lys	Thr	Glu	Glu	Gly	Arg	Trp	Ile	Ala	Lys	Asn	Ala	His	Asn	Tyr	Gly
		20						25					30		
Phe	Ile	Ile	Arg	Tyr	Pro	Lys	Asn	Lys	Glu	Ser	Ile	Thr	Gly	Tyr	Gln
		35					40					45			
Tyr	Glu	Pro	Trp	His	Leu	Arg	Tyr	Leu	Gly	Lys	Arg	Arg	Arg	Gln	Lys
	50					55					60				
Cys	Thr	Asn	Leu	Val	Lys	His									
65					70										

<210> 6787
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6787

Tyr	Asn	His	Asn	Cys	Asn	Asn	Lys	Lys	Met	Thr	Thr	Leu	Asn	Asn	Leu
1				5				10						15	
Asn	Leu	Tyr	Lys	Lys	Thr	Leu	Ser	Asn	Leu	Lys	Phe	Gly	Ser	Gly	Ser
		20						25					30		
Ala	Thr	Ala	Tyr	Ile	Ser	Ser	Tyr	Asn							
		35					40								

<210> 6788
 <211> 284
 <212> PRT
 <213> S.epidermidis

<400> 6788

Met	Asn	His	Asn	Phe	Ile	Lys	Leu	Ile	Gly	Glu	Val	Lys	Met	His	Tyr
1				5				10						15	
Ile	Lys	Phe	Ile	Glu	Ser	Lys	Asp	Asn	Thr	Lys	Leu	Tyr	Met	Lys	Val
		20						25					30		
Asn	Asp	Ile	Gln	Asp	Ala	Lys	Ala	Asn	Ile	Ile	Ile	Ala	His	Gly	Val
		35					40					45			
Ala	Glu	His	Leu	Asp	Arg	Tyr	Asp	Glu	Ile	Thr	Ala	Tyr	Leu	Asn	Glu
	50					55				60					
Ala	Gly	Phe	Ser	Val	Ile	Arg	Tyr	Asp	Gln	Arg	Gly	His	Gly	Arg	Ser
65					70				75					80	
Glu	Gly	Lys	Arg	Ala	Phe	Tyr	Ser	Asn	Ser	Asn	Glu	Ile	Val	Glu	Asp
			85						90					95	
Leu	Asp	Ala	Ile	Ile	Asn	Tyr	Val	Lys	Ser	Asn	Phe	Glu	Gly	Lys	Val
		100						105					110		
Tyr	Leu	Ile	Gly	His	Ser	Met	Gly	Gly	Tyr	Thr	Val	Thr	Leu	Tyr	Gly
		115					120					125			
Thr	Lys	His	Pro	Asn	Thr	Val	Asn	Gly	Ile	Ile	Thr	Ser	Gly	Ala	Leu
	130					135					140				
Thr	Arg	Tyr	Asn	Asn	Lys	Leu	Phe	Gly	Asn	Pro	Asp	Arg	Asn	Ile	Ser
145					150					155				160	
Pro	Asp	Thr	Tyr	Ile	Glu	Asn	Asn	Leu	Ser	Glu	Gly	Val	Cys	Ser	Asp

				165					170					175			
Leu	Glu	Val	Met	Glu	Lys	Tyr	Lys	Leu	Asp	Asp	Leu	Asn	Ala	Lys	Gln		
			180					185					190				
Ile	Ser	Met	Gly	Leu	Val	Phe	Ser	Ile	Met	Asp	Gly	Val	Arg	Tyr	Leu		
		195					200					205					
Lys	Asp	Asn	Ala	Gln	Gln	Phe	Thr	Asp	Asn	Ile	Leu	Ile	Leu	His	Gly		
	210					215					220						
Lys	Glu	Asp	Gly	Leu	Val	Ser	Tyr	Val	Asp	Ser	Leu	Gln	Leu	Tyr	Gln		
225					230					235					240		
Glu	Ile	Gly	Ser	Ala	His	Lys	Ser	Leu	His	Ile	Tyr	Asp	Arg	Leu	Glu		
			245						250					255			
His	Glu	Ile	Phe	Asn	Glu	Ser	Ser	Tyr	Asn	Arg	Thr	Ile	Phe	Asn	Glu		
		260						265					270				
Val	Ile	Glu	Trp	Leu	Glu	Thr	Glu	Leu	Thr	Tyr	Asn						
	275						280										

<210> 6789

<211> 47

<212> PRT

<213> S.epidermidis

<400> 6789

Thr	Val	His	Lys	Lys	Pro	Pro	Arg	Cys	Arg	Phe	Thr	Ile	His	Tyr	Tyr		
1				5					10					15			
Ile	Ser	Pro	Met	Ala	Asn	Glu	Thr	Glu	Gln	Met	Pro	Leu	Asn	Gln	Ser		
		20						25					30				
Asn	Asn	Phe	Leu	Asn	Phe	Val	Gly	Asn	Phe	Lys	Asn	Gln	Asn	Leu			
	35						40					45					

<210> 6790

<211> 440

<212> PRT

<213> S.epidermidis

<400> 6790

Asn	Ile	Asn	Lys	Tyr	Ile	Leu	Lys	Lys	Met	Arg	His	Asn	Ile	Phe	Tyr		
1				5					10					15			
Asn	Arg	Arg	Glu	Phe	Gln	Met	Ile	Asp	Asn	Phe	Met	Gln	Val	Leu	Lys		
		20						25				30					
Leu	Ile	Lys	His	Gln	Arg	Thr	Asn	Asn	Val	Val	Lys	Lys	Ser	Asp	Trp		
	35					40					45						
Asp	Lys	Gly	Asp	Leu	Tyr	Lys	Thr	Leu	Val	His	Asp	Lys	Leu	Pro	Lys		
50					55					60							
Gln	Leu	Lys	Val	His	Ile	Lys	Glu	Asp	Lys	Tyr	Ser	Val	Val	Gly	Lys		
65				70					75					80			
Val	Ala	Thr	Gly	Asn	Tyr	Ser	Lys	Val	Pro	Trp	Ile	Ser	Ile	Tyr	Asp		
			85					90					95				
Glu	Asn	Ile	Thr	Lys	Glu	Thr	Lys	Asp	Gly	Tyr	Tyr	Leu	Val	Tyr	Leu		
		100						105				110					
Phe	His	Pro	Glu	Gly	Glu	Gly	Ile	Tyr	Leu	Ser	Leu	Asn	Gln	Gly	Trp		
	115						120					125					
Ser	Lys	Ile	Ser	Asp	Met	Phe	Pro	Arg	Asp	Lys	Asn	Ala	Ala	Lys	Gln		
	130				135					140							
Arg	Ala	Leu	Thr	Leu	Ser	Ser	Glu	Leu	Asn	Lys	Tyr	Ile	Thr	Ser	Asn		
145				150					155					160			
Glu	Phe	Asn	Thr	Gly	Arg	Phe	Tyr	Tyr	Ala	Glu	Asn	Lys	Asp	Ser	Ser		

Tyr Asp Leu Lys Asn Asp Tyr Pro Ser Gly Tyr Ser His Gly Ser Ile
 165 170 175
 180 185 190
 Arg Phe Lys Tyr Tyr Asp Leu Asn Glu Gly Phe Thr Glu Glu Asp Met
 195 200 205
 Leu Glu Asp Leu Lys Lys Phe Leu Glu Leu Phe Asn Glu Leu Ala Ser
 210 215 220
 Lys Val Thr Lys Thr Ser Tyr Asp Ser Leu Val Asn Ser Ile Asp Glu
 225 230 235 240
 Ile Gln Glu Asp Ser Glu Ile Glu Glu Ile Arg Thr Ala Gln Lys Asp
 245 250 255
 Lys Thr Leu Lys Glu Val Glu Ala Pro Lys Gly Ile Ile Pro Lys Tyr
 260 265 270
 Lys Lys Gly Val Ser Lys Thr Thr Lys Asn Asp Ser Glu Ile Glu Lys
 275 280 285
 Ser Asn Lys Glu Asn Lys Leu Thr Gly Lys Val Gly Glu Lys Leu Ala
 290 295 300
 Leu Asn Tyr Phe Asn Glu Leu Ile Asp Asn Lys Ile Asp Glu Asp Lys
 305 310 315 320
 Lys Glu Gln Phe Arg Asn Ile Leu Asn Asp Asn Pro Gly Ser Gln His
 325 330 335
 Gly His Gly Tyr Asp Leu Val Ala Phe Asp Pro Thr Asn Thr Asp Lys
 340 345 350
 Ala Val Glu Lys Phe Ile Glu Ile Lys Thr Ser Thr Ser Ser Ile
 355 360 365
 Glu Glu Pro Phe Phe Met Ser Leu Asn Glu Met Phe Ala Met Lys Glu
 370 375 380
 Tyr Lys Gln Lys Tyr Leu Ile Leu Arg Ile Phe Asn Val Ser Gly Lys
 385 390 395 400
 Glu Pro Gln Phe Tyr Phe Ile Asp Pro Tyr Ala Asn Tyr Ser Glu Phe
 405 410 415
 Lys Asp Val Asp Asp Leu Ile Asp Lys Val Phe Asn Val Glu Ala Ile
 420 425 430
 Gln Tyr Lys Val Phe Gly Glu Lys
 435 440

<210> 6791

<211> 60

<212> PRT

<213> S.epidermidis

<400> 6791

Ala Glu Asn Asn Thr Lys Ile Tyr Lys Lys Lys Asp Asn Phe Tyr Ile
 1 5 10 15
 Ile Ser Ile Glu Ile Val Phe Phe His Leu Phe Arg Asn Val Ile Ser
 20 25 30
 Thr Glu Phe Phe Ser Lys Ile Thr Gly Arg Glu Lys Val Asp Val Ser
 35 40 45
 His Gln Gln Asn Leu Leu Lys Met Leu Ser Tyr Thr
 50 55 60

<210> 6792

<211> 124

<212> PRT

<213> S.epidermidis

<400> 6792

```

Thr Met Asn Asn Asp Arg Gly Lys Ser Leu Gln Ile Pro Gln Ser Thr
1          5          10          15
Ser Leu Lys Glu Gly Ser Ile Tyr Val Ala Thr Leu His Ser Val Thr
          20          25          30
Glu Thr Asp Tyr Ser Gly Asp Ile Lys His Gln Phe Thr Tyr Glu Ile
          35          40          45
Glu Ile Asp Gln Gln Ile Phe Tyr Val Asn Arg Ser Val Val Val Asn
50          55          60
Val Thr His Gln Gln Leu Ser Ile Asn Asp Trp Leu Glu Arg His Ser
65          70          75          80
Asn Tyr Ser Ala Ser His Glu Asn Tyr Glu Pro Tyr Ile Asp Gln Lys
          85          90          95
His Leu Ile Leu Gly Gln Tyr Asn Gly Asn Tyr Tyr Val Gln Asp
          100          105          110
Val Ala Ser Leu Asp Ala Phe Gly Gly Val Leu Ser
          115          120

```

<210> 6793

<211> 399

<212> PRT

<213> S.epidermidis

<400> 6793

```

His Val Asn Asn Phe Ser Asn Val Ile Ser Val Ala Ile Arg Ser Ile
1          5          10          15
Leu Lys Asn Lys Arg Arg Asn Ile Phe Thr Met Ile Gly Ile Ile Ile
          20          25          30
Gly Ile Ala Ser Val Ile Thr Ile Met Ser Leu Gly Asn Gly Phe Lys
          35          40          45
Lys Ser Thr Thr Glu Gln Phe Asn Asp Ala Gly Ala Gly Lys Asn Gln
50          55          60
Ala Ser Ile Ser Tyr Met Thr Glu Asn Met Glu Ala Pro Lys Asn Asn
65          70          75          80
Pro Phe Lys Gln Glu Asp Met Ser Val Val Glu Gln Val Asn Gly Val
          85          90          95
Lys Ser Ala Lys Val Lys Glu Asp Lys Asp Ser Thr Tyr Ser Val Lys
          100          105          110
Ile Thr Asn Thr His Gly Ser Ser Asp Ala Ser Leu Lys Lys Val Asp
          115          120          125
Lys Leu Thr Asp Val Asp Glu Gly Lys Gly Phe Thr Asn Asp Asp Asn
130          135          140
Glu Val Leu Glu Lys Val Ala Val Ile Asp Lys Lys Ile Ala Lys Lys
145          150          155          160
Val Phe Asn Asn His Ala Met Gly Gln Ser Ile Tyr Ile Asn Gly Glu
          165          170          175
Gly Phe Lys Val Val Gly Val Ser Asp Ser Ser Glu Val Asp Glu Ser
          180          185          190
Gly Met Pro Ile Glu Ser Leu Ile Gln Ile Pro Thr Lys Ser Phe Asn
          195          200          205
Lys Tyr Met Gly Asn Leu Thr Gln Gly Met Pro Gln Leu Leu Val Thr
210          215          220
Val Glu Lys Gly Ser Asp Lys Lys Asp Val Gly Lys Lys Val Glu Lys
225          230          235          240
Ala Leu Asn Lys Lys Gly Thr Gly Val Ser Glu Gly Gln Tyr Ser Tyr
          245          250          255

```

3040

Glu	Asp	Asn	Glu	Ala	Val	Met	Lys	Thr	Ile	Gly	Ser	Val	Leu	Asp	Thr
		260						265					270		
Ile	Thr	Tyr	Phe	Val	Ser	Ala	Val	Ala	Gly	Ile	Ser	Leu	Phe	Ile	Ala
		275					280					285			
Gly	Ile	Gly	Val	Met	Asn	Val	Met	Tyr	Ile	Ser	Val	Thr	Glu	Arg	Thr
	290					295					300				
Glu	Glu	Ile	Ala	Ile	Arg	Arg	Ala	Phe	Gly	Ala	Lys	Gly	Arg	Asp	Ile
305					310					315					320
Glu	Ile	Gln	Phe	Leu	Val	Glu	Ser	Val	Val	Leu	Cys	Leu	Ile	Gly	Gly
			325						330					335	
Ile	Ile	Gly	Leu	Ile	Leu	Gly	Ile	Ile	Ile	Ala	Thr	Leu	Ile	Asp	Leu
		340						345					350		
Val	Thr	Pro	Glu	Met	Val	Lys	Ser	Ser	Val	Ser	Leu	Gly	Ser	Val	Ile
		355					360					365			
Leu	Ala	Val	Gly	Val	Ser	Thr	Leu	Ile	Gly	Ile	Ile	Phe	Gly	Trp	Ile
	370					375					380				
Pro	Ala	Arg	Ser	Ala	Ser	Lys	Lys	Glu	Leu	Ile	Asp	Ile	Ile	Lys	
385					390					395					

<210> 6794

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6794

Ile	Thr	Asn	Lys	Ser	Leu	Phe	Thr	Met	Asn	Lys	Ser	Ile	Leu	Thr	Ile
1			5						10					15	
His	Tyr	Ile	Leu	Ile	Leu	Ile	Phe	Leu	Leu	Phe	Ser	Asn	Ile	Ser	Asp
		20						25					30		
Leu	Leu	Leu	Ser	Glu	Arg	Cys	Pro	Ile	Phe	Ile	Ser	Ile			
		35					40					45			

<210> 6795

<211> 124

<212> PRT

<213> S.epidermidis

<400> 6795

Pro	Lys	Asn	Lys	Ile	Phe	Leu	Glu	Arg	Val	Val	Arg	Met	Met	Asp	Glu
1			5						10					15	
Asn	Arg	Ser	Lys	Gly	Asn	Arg	Trp	Gly	Val	Trp	Ala	Phe	Phe	Gly	Ile
		20						25					30		
Leu	Leu	Val	Pro	Leu	Leu	Val	Pro	Leu	Leu	Cys	Cys	Ala	Gly	Pro	Ile
		35					40					45			
Leu	Leu	Val	Ala	Leu	Gly	Ser	Thr	Gly	Ile	Gly	Ala	Leu	Phe	Ala	Gly
	50					55					60				
Ala	Thr	Gly	Asn	Trp	Trp	Leu	Thr	Gly	Ile	Phe	Ala	Ala	Leu	Ala	Ile
65					70					75					80
Val	Met	Ile	Ala	Leu	Ile	Leu	Ser	Lys	Leu	Leu	Lys	Asn	Lys	Tyr	Asn
				85					90					95	
Ser	Pro	Glu	Gly	Asn	Gly	Lys	Thr	Lys	Asn	Lys	Thr	Asp	Cys	Cys	Thr
			100					105					110		
Pro	Pro	Glu	Ser	Val	Asp	Arg	Lys	His	Glu	Thr	Arg				
		115					120								

<210> 6796

6794-6796

<211> 422

<212> PRT

<213> S.epidermidis

<400> 6796

Cys	Glu	Cys	Asn	Lys	Ala	Lys	Glu	Glu	Phe	Glu	Met	Val	Gln	Gly	Pro
1			5						10					15	
Ile	Gln	Val	Asn	Ser	Glu	Ile	Gly	Lys	Leu	Lys	Thr	Val	Leu	Leu	Lys
			20					25					30		
Arg	Pro	Gly	Lys	Glu	Leu	Glu	Asn	Leu	Val	Pro	Asp	His	Leu	Ser	Gly
		35					40					45			
Leu	Leu	Phe	Asp	Asp	Ile	Pro	Tyr	Leu	Lys	Val	Ala	Gln	Glu	Glu	His
	50					55				60					
Asp	Lys	Phe	Ala	Gln	Thr	Leu	Arg	Asp	Glu	Gly	Ile	Glu	Val	Val	Tyr
65					70					75					80
Leu	Glu	Lys	Leu	Ala	Ala	Glu	Ser	Ile	Thr	Glu	Pro	Glu	Val	Arg	Glu
			85						90					95	
Asn	Phe	Ile	Asn	Asp	Ile	Leu	Thr	Glu	Ser	Lys	Lys	Thr	Ile	Leu	Gly
			100					105					110		
His	Glu	Thr	Glu	Ile	Lys	Glu	Phe	Phe	Ser	Lys	Leu	Ser	Asp	Gln	Glu
		115					120					125			
Leu	Val	Asn	Lys	Ile	Met	Ala	Gly	Val	Arg	Lys	Glu	Glu	Ile	Gln	Leu
	130					135					140				
Glu	Thr	Thr	His	Leu	Val	Glu	Tyr	Met	Asp	Asp	Arg	Tyr	Pro	Phe	Tyr
145				150					155						160
Leu	Asp	Pro	Met	Pro	Asn	Leu	Tyr	Phe	Thr	Arg	Asp	Pro	Gln	Ala	Ser
			165						170					175	
Ile	Gly	Arg	Gly	Met	Thr	Ile	Asn	Arg	Met	Tyr	Trp	Arg	Ala	Arg	Arg
			180					185					190		
Arg	Glu	Ser	Ile	Phe	Met	Thr	Tyr	Ile	Leu	Lys	His	His	Pro	Arg	Phe
		195					200					205			
Lys	Asp	Lys	Asp	Val	Pro	Val	Trp	Leu	Asp	Arg	Asn	Ser	Pro	Phe	Asn
	210					215					220				
Ile	Glu	Gly	Gly	Asp	Glu	Leu	Val	Leu	Ser	Lys	Asp	Val	Leu	Ala	Ile
225				230						235					240
Gly	Ile	Ser	Glu	Arg	Thr	Ser	Ala	Gln	Ala	Ile	Glu	Lys	Leu	Ala	Arg
			245						250					255	
Asn	Ile	Phe	Lys	Asp	Ala	Asn	Thr	Ser	Phe	Lys	Lys	Ile	Val	Ala	Ile
			260					265					270		
Glu	Ile	Pro	Asn	Thr	Arg	Thr	Phe	Met	His	Leu	Asp	Thr	Val	Leu	Thr
	275						280					285			
Met	Ile	Asp	Tyr	Asp	Lys	Phe	Thr	Val	His	Ala	Ala	Ile	Phe	Lys	Glu
	290					295					300				
Glu	Asn	Asn	Met	Asn	Ile	Phe	Thr	Ile	Glu	Gln	Asn	Asp	Gly	Lys	Asp
305				310						315					320
Asp	Ile	Lys	Ile	Thr	Arg	Ser	Ser	Lys	Leu	Arg	Glu	Thr	Leu	Ala	Glu
			325						330					335	
Val	Leu	Glu	Val	Glu	Lys	Val	Asp	Phe	Ile	Pro	Thr	Gly	Asn	Gly	Asp
			340					345					350		
Val	Ile	Asp	Gly	Ala	Arg	Glu	Gln	Trp	Asn	Asp	Gly	Ser	Asn	Thr	Leu
		355					360					365			
Cys	Ile	Arg	Pro	Gly	Val	Val	Val	Thr	Tyr	Asp	Arg	Asn	Tyr	Val	Ser
	370					375					380				
Asn	Gln	Leu	Leu	Arg	Asp	Lys	Gly	Ile	Lys	Val	Ile	Glu	Ile	Thr	Gly
385				390						395					400
Ser	Glu	Leu	Val	Arg	Gly	Arg	Gly	Gly	Pro	Arg	Cys	Met	Ser	Gln	Pro

Leu Phe Arg Glu Asp Ile
420

410

415

<210> 6797
<211> 44
<212> PRT
<213> S.epidermidis

<400> 6797
Leu Phe Ser Asn Tyr Lys Val Phe Tyr Ile His Glu His Asn Thr Pro
1 5 10 15
Gly Trp Arg Asn Pro Ala Pro Ser Phe Met Phe Tyr Asn Met Lys
20 25 30
Lys Ala Pro Thr Pro Phe Leu Leu Val Trp Met Leu
35 40

<210> 6798
<211> 88
<212> PRT
<213> S.epidermidis

<400> 6798
Ile His Ser Asn Ser Ser Arg His Cys Gly Leu Val Asp Lys Ser Lys
1 5 10 15
Lys Leu Thr Asn Ser Thr Val Ile His Met Trp Ile Asn Cys Val Cys
20 25 30
Cys Val Leu Phe Phe His Ile Ile His Asn Cys Tyr Phe Leu Phe Arg
35 40 45
Gly Thr Thr Pro His Leu Phe Lys Cys Leu Gly Ile Asp Leu His Ser
50 55 60
Asn Tyr Ser Leu Lys Asp Ser Leu Gln Ser Ala Asn Phe Gln Phe Ile
65 70 75 80
Gln Tyr Gly Phe Ile Ser His Tyr
85

<210> 6799
<211> 53
<212> PRT
<213> S.epidermidis

<400> 6799
Gln Leu Phe Lys Gly Tyr Ile Gly Lys Ile His Thr His Thr Ser Asn
1 5 10 15
Ile Phe Lys Arg Glu Lys Gln Asn Lys Asn Arg Thr Ile Asp Ser Leu
20 25 30
Lys Gln Leu Leu Tyr Gly Lys Ile Phe Phe Met Thr Tyr Leu His Glu
35 40 45
His Asn Gln Cys Leu
50

<210> 6800
<211> 200
<212> PRT
<213> S.epidermidis

6797 6798 6799 6800

<400> 6800

Lys His Ile Lys Gly Ala Ile Ile Met Lys Lys Glu Ile Ile Glu Trp
 1 5 10 15
 Ile Val Ala Ile Ile Val Ala Ile Val Ile Val Thr Leu Val Gln Lys
 20 25 30
 Phe Leu Phe Ala Ser Tyr Thr Val Lys Gly Ala Ser Met His Pro Thr
 35 40 45
 Phe Glu Asn Arg Glu Lys Val Ile Val Ser Arg Ile Ala Lys Thr Leu
 50 55 60
 Asp His Ile Asp Thr Gly Asp Val Val Ile Phe His Ala Asn Ala Lys
 65 70 75 80
 Gln Asp Tyr Ile Lys Arg Leu Ile Gly Lys Pro Gly Asp Ser Val Glu
 85 90 95
 Tyr Lys Lys Asp Gln Leu Tyr Leu Asn Gly Lys Lys Val Asp Glu Pro
 100 105 110
 Tyr Leu Ser Glu Asn Lys Lys His Lys Val Gly Glu Tyr Leu Thr Glu
 115 120 125
 Asn Phe Lys Ser Lys Asp Leu Lys Gly Thr Asn Gly Asn Met Lys Ile
 130 135 140
 Pro Ser Gly Lys Tyr Leu Val Leu Gly Asp Asn Arg Gln Asn Ser Ile
 145 150 155 160
 Asp Ser Arg Met Asp Glu Val Gly Leu Leu Asp Lys Asn Gln Val Val
 165 170 175
 Gly Lys Val Val Leu Arg Tyr Trp Pro Phe Asn Arg Trp Gly Gly Ser
 180 185 190
 Phe Asn Pro Gly Thr Phe Pro Asn
 195 200

<210> 6801

<211> 52

<212> PRT

<213> S.epidermidis

<400> 6801

Arg Thr Ile Asn Ser Leu Phe Ile Ser Ile Asp Asp Arg Val Gly Ser
 1 5 10 15
 Leu Leu Pro Tyr Ile Tyr Tyr Leu Phe Ile Lys Asn Asn Gly Ile Leu
 20 25 30
 Gly Leu Cys Leu His Asn Pro Ser Ala Ser Ser Asn Leu Gln Ile Pro
 35 40 45
 Phe Leu Ser Arg
 50

<210> 6802

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6802

Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Tyr Tyr Gly Ile Glu Met Leu Val
 35 40 45
 Thr Phe Ile Gln Asp His Tyr Thr

50

55

<210> 6803
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6803
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Gly Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Phe Ala Ile Gln Arg Gly Asp Ile
 35 40 45
 Ser Arg
 50

<210> 6804
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6804
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Gly Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Thr Lys Lys
 35 40

<210> 6805
 <211> 69
 <212> PRT
 <213> S.epidermidis

<400> 6805
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Lys Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Leu Lys Asp Met Phe Val Ile His
 35 40 45
 Ile Cys Lys Asn Gln Lys Ile Met Val Ile Tyr Ile Ile Ile Phe Asp
 50 55 60
 Asn Asn Tyr Leu Lys
 65

<210> 6806
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 6806
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr

6803 6804 6805 6806

20 25 30
 Arg Phe Asn Phe Ala Thr Glu Pro Ile Phe Cys Tyr Asn Tyr
 35 40 45

<210> 6807
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6807
 Lys Val Asn Lys Asn Leu Thr Lys Leu Val Lys Lys Ile Asn Ser Phe
 1 5 10 15
 Tyr Val Ile Leu Asn Leu Ala Val Ile Phe Ser Phe Phe Ile Arg Glu
 20 25 30
 Lys Ser Tyr Arg Gly Asp Phe Phe Asp Lys
 35 40

<210> 6808
 <211> 171
 <212> PRT
 <213> S.epidermidis

<400> 6808
 Leu Gln Asn Lys Asn Gly Asn Ile Thr Lys Glu Ile Glu Glu Glu Asn
 1 5 10 15
 Leu Asp Ile Pro Pro Glu Ala Leu Asn Tyr Ile Ala Asn Gln Ile Gln
 20 25 30
 Ser Asn Ile Arg Glu Leu Glu Gly Ala Leu Thr Arg Leu Leu Ala Tyr
 35 40 45
 Ser Lys Leu Gln Gly Lys Pro Ile Thr Thr Glu Leu Thr Ala Glu Ala
 50 55 60
 Leu Lys Asp Ile Ile Gln Ser Pro Lys Ser Lys Lys Ile Thr Ile Gln
 65 70 75 80
 Asp Ile Gln Lys Ile Val Gly Gln Tyr Tyr Ser Val Arg Ile Glu Asp
 85 90 95
 Phe Ser Ala Lys Lys Arg Thr Lys Ser Ile Ala Tyr Pro Arg Gln Ile
 100 105 110
 Ala Met Tyr Leu Ser Arg Glu Leu Thr Asp Phe Ser Leu Pro Lys Ile
 115 120 125
 Gly Glu Glu Phe Gly Gly Arg Asp His Thr Thr Val Ile His Ala His
 130 135 140
 Glu Lys Ile Ala Asn Asp Ile Lys Ser Asp Pro Thr Phe Lys Gln Glu
 145 150 155 160
 Val Glu Asn Leu Glu Lys Glu Ile Arg Asn Gln
 165 170

<210> 6809
 <211> 112
 <212> PRT
 <213> S.epidermidis

<400> 6809
 Lys Lys Ser Lys Met Glu Glu Asn Ser Met Lys Ile Asn Arg Tyr Ile
 1 5 10 15
 Thr Arg Gly Ile Ser Glu Gln Leu Ser Leu Asp Leu Gln Ile Leu Leu
 20 25 30

Trp Asn Met Val Lys Asp Arg Asp Asn Gln Leu Asn Thr Asp Tyr Leu
 35 40 45
 His Ile Phe Lys Leu Gln Glu Asp Asp Asn Met Leu Ser Ile Thr His
 50 55 60
 Glu Gln Glu Gln Pro Ala Tyr Lys Leu Glu Tyr His Tyr Thr Asn Tyr
 65 70 75 80
 Ile Lys Asn Gln Asn Ala Leu Pro Lys Lys Val Tyr Val Ile Arg Glu
 85 90 95
 Asp Asp Val Asp Ala Phe Tyr Tyr Val Met Leu Leu Pro Glu Glu Tyr
 100 105 110

<210> 6810

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6810

Tyr Tyr Gly Asn Leu Arg Thr Asn Gly Ser Glu Leu Tyr Phe Gln Ala
 1 5 10 15
 His Phe Val Gly Ser Val Gln Ser Thr Val Arg Thr Lys Asn Val Gln
 20 25 30
 Asp Tyr Ser Ala Asp Thr Arg Cys Asp Tyr Asp
 35 40

<210> 6811

<211> 94

<212> PRT

<213> S.epidermidis

<400> 6811

Lys Tyr Leu Lys Gln Val Phe Tyr Met Gln His Lys Asn Lys Phe Gln
 1 5 10 15
 Arg Ile Asn Gln Ile Ile Gln Val Ile Gly Phe Leu Ser Phe Leu Ala
 20 25 30
 Ile Leu Thr Ile Ile Thr Leu Asn Phe Phe Ile Lys Gly His Leu Gln
 35 40 45
 Gly His Phe Glu Ile Gly Phe Asn Ile Gln Ser Asn Gln Val Tyr Val
 50 55 60
 Val Thr Thr Leu Ile Ile Val Thr Ile Ile Cys Thr Ile Leu Ser Ala
 65 70 75 80
 Ile Leu Asn Met Leu Ser Asn Lys Lys Gln Asn Tyr Lys His
 85 90

<210> 6812

<211> 73

<212> PRT

<213> S.epidermidis

<400> 6812

Lys Leu Leu Lys Pro Tyr Ser Leu Asp Tyr Met Ser His Ile Asn Tyr
 1 5 10 15
 Phe Met Ile Ile Ala Asn Phe Cys Cys Ile Phe Asn Ile Ile Lys Glu
 20 25 30
 Met Phe Thr Ile Gln Lys Ala Ser Lys Phe Ser Val Ser Val Ile Leu
 35 40 45
 Lys Asp Glu Leu Ser Leu Lys Cys Phe Asn Thr Lys Leu Tyr Asn Tyr

50 55 60
 Leu Cys Asn Ser Phe Ile Lys Leu Asp
 65 70

<210> 6813
 <211> 74
 <212> PRT
 <213> S.epidermidis

<400> 6813
 Tyr Phe Ile Lys Glu Phe Asp Phe Met Lys Ile Asn His Ala Gly Thr
 1 5 10 15
 Leu Ser Val Asp Tyr Phe Val Ser Tyr Leu Asn Leu Ile Met Ile Ser
 20 25 30
 Arg Glu Val Ser Leu Lys Glu Ala Val Ser Tyr Met Lys Asn Glu Phe
 35 40 45
 Phe Lys Gly Lys Thr Asp Leu Tyr Gly Lys Val Thr Glu Thr His Phe
 50 55 60
 Asn Gln Ala Ile Gln Glu Leu Lys Gln Lys
 65 70

<210> 6814
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6814
 Lys Ser Ile Lys Lys Cys Leu Pro Tyr Trp Val Gly Asn Thr Val Pro
 1 5 10 15
 Thr Gly Ile Glu Pro Ala Ile Ser Cys Val Thr Gly Arg Arg Val Asn
 20 25 30
 Arg Tyr Thr Thr Gly Pro Arg Met Val Thr Pro Thr Gly Leu Glu Pro
 35 40 45
 Val Leu Pro Pro
 50

<210> 6815
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 6815
 Lys Leu Ile Asn Phe Ile Lys Thr Cys Ile Thr Lys Asn Gln Phe Tyr
 1 5 10 15
 Thr Ile Pro Lys Lys Ser Ile Ile Phe Val Ile Leu Thr Asn Ile Leu
 20 25 30
 Val Ile Met Thr Asn Ile Leu Tyr Ser Leu Tyr Val Arg Lys
 35 40 45

<210> 6816
 <211> 127
 <212> PRT
 <213> S.epidermidis

<400> 6816
 Arg Lys Val Lys Lys Val Lys Lys Val Glu Asn Thr Asn Ser Asn Met

6813-6816: 1-499

```

1           5           10           15
His Lys Asn Asp Asn Ser Tyr Val Leu Ser Ala Leu Ser Tyr Leu Ser
                20           25           30
Ile Phe Phe Ala Pro Val Ile Leu Pro Leu Phe Val Trp Ile Leu Ala
                35           40           45
Asp Glu Pro Thr Ser Glu His Gly Lys Lys Ala Phe Ile Asn His Ile
                50           55           60
Met Thr Trp Val Ser Phe Phe Ile Gly Arg Leu Ala Phe Ile Phe Ser
65                70           75           80
Lys Glu Val Phe Asp Lys Pro Leu Asp His Gln Leu Leu Ile Phe Ser
                85           90           95
Ile Leu Leu Ile Ile Thr Ile Ile Phe Leu Ile Ala Leu Ile Leu
                100          105          110
Tyr Ile Leu Asn Ile Asn Arg Gly Ile Lys Ile Leu Leu Lys Lys
                115          120          125

```

<210> 6817

<211> 127

<212> PRT

<213> S.epidermidis

<400> 6817

```

Arg Lys Val Lys Lys Val Lys Lys Val Glu Asn Thr Asn Ser Asn Met
1           5           10           15
His Lys Asn Asp Asn Ser Tyr Val Leu Ser Ala Leu Ser Tyr Leu Ser
                20           25           30
Ile Phe Phe Ala Pro Val Ile Leu Pro Leu Phe Val Trp Ile Leu Ala
                35           40           45
Asp Glu Pro Thr Ser Gly His Gly Lys Lys Ala Leu Gly Asn His Ile
                50           55           60
Met Thr Trp Ile Ser Phe Cys Val Gly Arg Gly Ile Phe Ile Phe Ser
65                70           75           80
Lys Gly Val Phe Asp Lys Pro Phe Asp His Gln Leu Leu Ile Phe Val
                85           90           95
Ile Ala Leu Ile Ile Ala Ile Val Phe Phe Leu Ile Ala Leu Ile Leu
                100          105          110
Tyr Ile Leu Asn Ile Ile Arg Gly Ile Lys Ile Leu Leu Lys Lys
                115          120          125

```

<210> 6818

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6818

```

Leu Leu Ser Asn Asn Gln Ala Thr His Phe Leu Pro Lys Leu Asn Leu
1           5           10           15
Ile Tyr Thr Tyr Tyr Phe Phe Leu Ser Ala Phe Lys Ile Asn Glu Ile
                20           25           30
Ile Lys Ile Lys Ile Ile Glu Pro Asn Asn Ala Gly Lys Met
                35           40           45

```

<210> 6819

<211> 84

<212> PRT

<213> S.epidermidis

<400> 6819

```

Asn Ser Ser Asn Met Asp Gly Pro Lys Thr Ser Met Asp His Glu Thr
1          5          10          15
Lys Gln Ser Asp Trp Arg Thr Val Ala Ser Cys Leu Ala Ser Gln Asn
          20          25          30
Tyr Ile Ser Leu Val Lys Gly Leu Val His Tyr Phe Thr Ala Ile Glu
          35          40          45
Asp Glu Glu Ile Leu Asp Lys Ile Tyr Asp Asp Phe Met Asn Asp Asp
          50          55          60
Ser Ile Thr Thr Val Leu Asn Asn Asp Leu Gln Thr Ile Ile Asn His
          65          70          75          80
Tyr Leu Ser Lys

```

<210> 6820

<211> 59

<212> PRT

<213> S.epidermidis

<400> 6820

```

Arg Ala Thr Asn Thr His Asp Thr Arg Ser Lys Arg Leu Tyr Ile Cys
1          5          10          15
His Arg Trp Leu Gln Trp Phe Thr Ser Arg Arg Leu Thr Thr Gln Gln
          20          25          30
Leu Arg Ser Ile Ile Gln His Tyr Asp Leu Pro Ala Pro Asn Asp Ala
          35          40          45
Arg His Ile Asp Arg Thr Asn Leu Ser Leu Ile
          50          55

```

<210> 6821

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6821

```

Arg His Thr Asn Val Cys Leu Lys Thr Met Asn Ile Tyr Cys His Arg
1          5          10          15
Leu Ser Tyr Lys Ile Met Lys Ile Ile His Glu Val Thr Ser Ile Tyr
          20          25          30
Leu Leu Glu Asn Ala Cys Lys Asn Ile Lys
          35          40

```

<210> 6822

<211> 374

<212> PRT

<213> S.epidermidis

<400> 6822

```

Lys Glu Gln Asn Thr Met Tyr Gln Thr Asn Thr Arg Asp Leu Ile Thr
1          5          10          15
Lys Leu Pro Gln Ser Asn Lys Thr Glu His Phe Leu Met Asn Lys Phe
          20          25          30
Ser Asn Gln Asp Lys Val Gln Gln Leu Gln Arg Gln Ile Ser Gln Gln
          35          40          45
Leu Asp Gln Gln Tyr Asn Glu Leu Leu Ser Asn Glu Lys Ala Lys Leu

```

50 55 60
 Asp Gln Tyr Val Glu Val His His Asn Leu Glu Pro Leu Lys Lys Glu
 65 70 75 80
 Ile Glu Ser Glu Ser Ile Asn Leu Asp Thr Asp Lys Leu Pro Asp Ile
 85 90 95
 Lys Ala Thr Met Leu Glu Lys Ala Lys Asn Asp Glu His Ser Asp Lys
 100 105 110
 Ile Glu His Leu Phe Asp Arg Leu Asp Gln Ser Leu Asn Gly Thr Asn
 115 120 125
 Arg Leu Tyr Thr Gln Leu Ser Leu Ile Gly Thr Arg Thr His Arg Ile
 130 135 140
 Thr Thr Lys Arg Phe Asn Val Gln Gly Leu Pro Lys Leu Val Gln Gln
 145 150 155 160
 Thr Ile Leu Pro Ser Gln Phe Lys Lys Val Tyr Thr Ile Asp Phe Lys
 165 170 175
 Ser Phe Glu Pro Ser Val Ala Ala Tyr Met Thr Gln Asp Glu Gln Leu
 180 185 190
 Ile Asp Tyr Leu Asn Leu Glu Glu Gly Leu Tyr Asp Ala Leu Leu Arg
 195 200 205
 Asp Leu Ser Leu Ser Lys Glu Lys Arg Val Ser Val Lys Arg Ala Phe
 210 215 220
 Ile Gly Ser Phe Leu Phe Gly Gly Arg Tyr Ser Ser Ser Lys Phe Lys
 225 230 235 240
 Ile Asn Gln Glu Val Ser Glu Ile Asn Trp Leu Gln Val Met Ser Lys
 245 250 255
 Phe Lys Lys Ile Ile Glu Phe Lys Glu Gln Val Glu Lys Tyr Lys Thr
 260 265 270
 Met Pro Thr Pro Tyr Gly Ile Glu His Asp Met Ser Ala Phe Gln Gly
 275 280 285
 Ser Ser Ile Met Ala Ile Tyr Val Gln Thr Val Ala Ser Tyr Ile Phe
 290 295 300
 Lys His Ile Leu Leu Glu Val Tyr Lys Ala Gln Cys Glu Gln Lys Thr
 305 310 315 320
 Phe Lys Ile Ile Val Pro Ile His Asp Ala Ile Met Ile Glu Cys Asn
 325 330 335
 Asp Lys Glu Ile Ala Gln Ser Val Ala Gln Leu Met Lys Asp Thr Ala
 340 345 350
 Asn Arg Leu Phe Asn Gly Glu Phe Ala His Val Thr Val Glu Ala Leu
 355 360 365
 Gly Gly Ile Asp Asn Glu
 370

<210> 6823

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6823

Gln Phe Lys Lys His Phe Thr His Cys Lys Lys Glu Ser Lys Thr Tyr
 1 5 10 15
 Thr Ala Tyr Thr Glu Ser Leu His Thr Leu Arg Glu Gly Ile Glu Arg
 20 25 30
 Lys Phe Glu Asn Gly Leu Gly Val Leu Met Pro Ile
 35 40

<210> 6824

<211> 61
 <212> PRT
 <213> S.epidermidis

<400> 6824

Glu	Phe	Lys	Lys	Lys	Glu	Val	Arg	Phe	Ser	Tyr	Thr	Asn	Leu	Glu	Leu
1				5					10					15	
Leu	Tyr	Lys	His	Ser	Leu	Leu	Asn	Leu	Asn	Leu	Cys	Ser	Ser	Phe	Leu
			20					25					30		
Ser	Lys	Arg	Pro	Thr	Ala	Phe	Glu	Leu	Asn	Phe	Glu	Leu	Leu	Val	Glu
		35					40					45			
Leu	Ser	Ile	Asn	Ser	Tyr	Ile	Asn	Val	Ser	Asn	Gln	Leu			
	50					55					60				

<210> 6825

<211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6825

Glu	Ala	Lys	Asn	Phe	Thr	Gln	Pro	Phe	Ser	Phe	His	Phe	Pro	Ile	His
1				5					10					15	
Gly	Phe	Lys	Asn	Pro	Thr	Tyr	Tyr	Lys	Arg	Ile	Ser	Lys	Gly	Glu	Ser
			20					25					30		
Lys	Ala	Asp	Leu	Phe	Phe	Ile	Arg	Ile							
		35					40								

<210> 6826

<211> 256
 <212> PRT
 <213> S.epidermidis

<400> 6826

Lys	Asn	Lys	Asn	Ala	Arg	Arg	Gly	Asn	Met	Leu	Thr	Val	Tyr	Gly	His
1				5					10					15	
Arg	Gly	Leu	Pro	Ser	Lys	Ala	Pro	Glu	Asn	Thr	Ile	Ala	Ser	Phe	Lys
			20					25					30		
Ala	Ala	Ser	Glu	Val	Glu	Gly	Ile	Asn	Trp	Leu	Glu	Leu	Asp	Val	Ala
		35					40					45			
Ile	Thr	Lys	Asp	Glu	Gln	Leu	Ile	Ile	Ile	His	Asp	Asp	Tyr	Leu	Glu
	50					55					60				
Arg	Thr	Thr	Asn	Met	Ser	Gly	Glu	Ile	Thr	Glu	Leu	Asn	Tyr	Asp	Glu
65				70					75					80	
Ile	Lys	Asp	Ala	Ser	Ala	Gly	Ser	Trp	Phe	Gly	Glu	Lys	Phe	Lys	Asp
			85					90						95	
Glu	His	Leu	Pro	Thr	Phe	Asp	Asp	Val	Val	Lys	Ile	Ala	Asn	Glu	Tyr
			100					105					110		
Asn	Met	Asn	Leu	Asn	Val	Glu	Leu	Lys	Gly	Ile	Thr	Gly	Pro	Asn	Gly
		115					120					125			
Leu	Ala	Leu	Ser	Lys	Ser	Met	Val	Lys	Gln	Val	Glu	Glu	Gln	Leu	Thr
	130					135					140				
Asn	Leu	Asn	Gln	Asn	Gln	Glu	Val	Leu	Ile	Ser	Ser	Phe	Asn	Val	Val
145					150					155				160	
Leu	Val	Lys	Leu	Ala	Glu	Glu	Ile	Met	Pro	Gln	Tyr	Asn	Arg	Ala	Val
				165				170						175	
Ile	Phe	His	Thr	Thr	Ser	Phe	Arg	Glu	Asp	Trp	Arg	Thr	Leu	Leu	Asp

			180					185					190				
Tyr	Cys	Asn	Ala	Lys	Ile	Val	Asn	Thr	Glu	Asp	Ala	Lys	Leu	Thr	Lys		
		195					200					205					
Ala	Lys	Val	Lys	Met	Val	Lys	Glu	Ala	Gly	Tyr	Glu	Leu	Asn	Val	Trp		
	210					215					220						
Thr	Val	Asn	Lys	Pro	Ala	Arg	Ala	Asn	Gln	Leu	Ala	Asn	Trp	Gly	Val		
225					230					235					240		
Asp	Gly	Ile	Phe	Thr	Asp	Asn	Ala	Asp	Lys	Met	Val	His	Leu	Ser	Gln		
				245					250					255			

<210> 6827

<211> 670

<212> PRT

<213> S.epidermidis

<400> 6827

Val	Asn	Lys	Asn	Ile	Thr	Ala	Leu	Lys	Ser	Thr	Glu	Asn	Thr	Thr	Tyr		
1				5					10					15			
Met	Gln	Tyr	Thr	Val	His	Ile	Asp	Asp	Gln	Ile	Ile	Asn	Asn	Ile	Lys		
			20					25					30				
Glu	Cys	Thr	Lys	Lys	Phe	Lys	Ile	Leu	Pro	Met	Glu	Asp	Lys	Ile	Pro		
		35					40					45					
Leu	Ser	Pro	Leu	Leu	Gln	Pro	Glu	Tyr	Ala	Gly	Glu	Val	Gln	Asp	Phe		
	50					55					60						
Ile	Ser	Thr	Tyr	Glu	Gln	Phe	Met	Ile	Asn	Phe	Gly	Lys	Val	Ile	Leu		
65					70					75					80		
Asp	Ser	Gln	Gly	Ile	Lys	Ile	Gln	Phe	Glu	Ser	Glu	Ser	Leu	Ser	Ser		
				85					90					95			
Ile	Gln	Arg	Gly	Ile	Gln	Glu	His	Cys	Tyr	Leu	Asn	Lys	Arg	Thr	Asn		
			100					105					110				
Asp	Ile	Asp	Val	Thr	Lys	Glu	Trp	Tyr	Leu	Cys	Lys	Phe	Ser	Asn	Arg		
		115					120					125					
Thr	Leu	Glu	Glu	Asp	Lys	Asn	Gln	Leu	Tyr	Asn	Ala	Leu	Lys	Gln	Leu		
	130					135					140						
Met	Asn	Asp	Ser	Lys	Asn	Lys	Lys	Gln	Ala	Phe	Gln	Glu	Val	Phe	Lys		
145					150					155					160		
Val	His	Ile	Asp	Ile	Tyr	Leu	Tyr	Asn	Lys	Glu	Lys	Ser	Glu	Tyr	Lys		
				165					170					175			
Tyr	Gln	Ala	Ser	Ser	Tyr	Phe	Tyr	Leu	Val	Lys	Glu	Asn	Pro	Lys	Ile		
			180					185					190				
Ile	Tyr	Lys	Lys	Arg	His	Leu	Gln	Glu	Lys	Gln	Gly	Ile	Lys	Gly	Thr		
	195						200					205					
Thr	Phe	Thr	Asn	Lys	Leu	Lys	Leu	Leu	Asn	Lys	Met	Tyr	Gly	Val	Asp		
	210					215					220						
Val	Ala	Lys	Tyr	Gln	Pro	Phe	Tyr	Asn	Ser	Asn	Asn	Pro	Glu	Tyr	Glu		
225					230					235					240		
Arg	Gly	Gln	Phe	Gly	Glu	Arg	Tyr	Ile	Ser	Gln	Arg	Ser	Asn	Tyr	Glu		
				245					250					255			
Phe	Asn	Arg	Leu	Gln	Tyr	Gln	Ile	Ile	Tyr	Ile	Leu	Ser	Lys	Ile	Leu		
			260					265					270				
Asp	Lys	His	Pro	Leu	Pro	Lys	Ser	Asp	Asn	Asn	Tyr	Lys	His	Ile	Pro		
		275					280					285					
Thr	Ile	Glu	Lys	Ala	Ile	Leu	Arg	Asp	Asp	Ser	His	Asn	Phe	Tyr	Glu		
	290					295					300						
Tyr	Phe	Glu	Asp	Ile	Met	Lys	Glu	Ile	Met	Asn	Met	Asp	Asn	Ser	Pro		
305					310					315					320		

35 40 45
 Tyr Tyr Asn Lys His Lys Glu Asp Ile Ile Arg Glu Lys Glu Lys Lys
 50 55 60
 Leu Thr Pro Phe Leu Arg Glu Leu Glu Lys Arg Asp Ile Gln Tyr Lys
 65 70 75 80
 Ile Asp Val Asp Phe Gly His Ile Lys Asp Thr Ile Leu Glu Lys Ile
 85 90 95
 Thr Ser Gly Asp Ile Asn Asn Gly Glu Phe Asp Leu Val Ile Met Ser
 100 105 110
 Asn His Arg Val Asp Leu Asn Ile Lys His Val Leu Gly Asp Val Thr
 115 120 125
 His Lys Ile Ala Lys Arg Ser Ser Val Pro Val Leu Ile Val Lys
 130 135 140

<210> 6829
 <211> 59
 <212> PRT
 <213> S.epidermidis

<400> 6829
 Asn Cys Lys Asn Phe Ile Ile His Lys Val Tyr Leu Phe Tyr Phe Asn
 1 5 10 15
 Phe Asn Val Lys Ala Leu Ile Ala Thr Ile Thr Val Leu Lys Asp Ile
 20 25 30
 Asn Ile Ala Pro Thr Ala Gly Asp Asn Ile Asn Pro Ile Lys Ala Asn
 35 40 45
 Ala Pro Ala Ala Lys Gly Thr Ala Thr Ile Leu
 50 55

<210> 6830
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6830
 Thr Leu Lys Asn Gln Phe Ser Asp Met Leu Ile Tyr Phe Glu Leu Gly
 1 5 10 15
 Phe Met Ser Gln Ala His Gln Ala Gln Ser Ala Thr Ser Leu Phe Leu
 20 25 30
 Tyr Leu Ile Cys Ser Asp Met Val Phe Tyr Thr Val
 35 40

<210> 6831
 <211> 428
 <212> PRT
 <213> S.epidermidis

<400> 6831
 Ser Arg Lys Lys Leu Thr His Phe Lys Asn Lys Cys Leu Lys Ser Leu
 1 5 10 15
 Lys Arg Gly Phe Tyr Val Met Leu Ser Lys Lys Gln Ile Lys Lys Thr
 20 25 30
 Leu Asn Ser Asp Lys Met Pro Ser Leu Ile Val Asn Glu Leu Asp Arg
 35 40 45
 Glu Leu Gln Asn Lys Leu Lys Gln Gln Tyr Pro Ser Lys Glu Glu Leu
 50 55 60

Ile Lys Glu Leu Lys Tyr Asp Ala Val Asn Glu Asn Ser Ala Val Leu
 65 70 75 80
 Lys Asn Glu Leu Thr Ser Lys Leu Lys Phe Lys Leu Lys Asp Tyr Gln
 85 90 95
 Asp Ser Asn Glu Phe Leu Phe Tyr Leu Lys Asn Ser Gln Lys Met Ile
 100 105 110
 Glu Ile His Asp Tyr Lys Met Glu Gln Phe Phe Glu Asp Ile Pro Leu
 115 120 125
 Glu Asp Ser Asp Val Tyr Lys Ser Ile Ala Asn Asn Glu Asp Thr Glu
 130 135 140
 Thr Tyr Ile Ile Met Lys Ala Pro Glu Phe Asn Glu Glu Asp Lys Leu
 145 150 155 160
 Asn Ile Ser Ile Lys Val Asp Gly Lys Phe Lys Glu Leu Asp Phe His
 165 170 175
 Arg Ile Ala Tyr Asp Ser Lys Lys Glu Met Lys Tyr Leu Tyr Gln Asn
 180 185 190
 Arg Tyr Ile Lys Ile Phe Met Leu Ile Glu Lys Asn Leu Glu Tyr Ile
 195 200 205
 Ser Trp Gly Phe His His Leu Phe Asn Glu Ser Ile Gly Glu Val Asn
 210 215 220
 Thr Ile Asn Ile Ile Asp Thr Tyr Lys Met Leu Ile Ala Leu Ala Ser
 225 230 235 240
 Gly Glu Met Tyr Thr Ala Asn Lys Ile Lys Phe Asn Asn Asp Ser Ala
 245 250 255
 Ser Lys Asn Lys Glu Ile Leu Glu Ser Leu Asn Arg Asp Leu Lys Leu
 260 265 270
 Phe Glu Ile Ile His Glu Phe Gln Asn Ser Leu Asp Lys Glu Phe Lys
 275 280 285
 Ile Ser Thr Pro Phe Asn Ser Lys Glu Ile Ile Glu Gly Val Lys Thr
 290 295 300
 Tyr Phe Leu Leu Tyr Lys Gln Lys Leu Ile Leu Glu Glu Lys Arg Leu
 305 310 315 320
 Glu Ser Leu Leu Ile Lys Thr Ser Ser Phe Asp Leu Glu Asp Ile Lys
 325 330 335
 Gly Lys Lys Phe Thr Leu Ile Gln Glu Glu Lys Val Thr Lys Thr Ile
 340 345 350
 Phe Thr Gln Lys Ile Ser Tyr Thr Gln Tyr Gln Cys Tyr Tyr Gln Val
 355 360 365
 Lys Ser Ser Asp Tyr Glu Lys Leu Gln Asp Asp Glu Phe Lys Leu Lys
 370 375 380
 Phe Asn Pro Glu Asp Val Ile Thr Ile Ile Leu Lys Ala Ser Phe Asn
 385 390 395 400
 Thr Thr Glu Pro Ile Gly Leu Glu Asn Ile Ala Phe Glu Glu Ala Glu
 405 410 415
 Thr Leu Asp Thr Phe Ile Ser Asn Tyr Lys Ser Asn
 420 425

<210> 6832

<211> 146

<212> PRT

<213> S.epidermidis

<400> 6832

Gly Gly Lys Asn Met Lys Phe Gln Val Ser Pro Tyr Phe Leu Ile Thr
 1 5 10 15
 Gln Asn Ala Glu Gly Leu Lys Lys Leu Tyr Glu Glu Leu Phe Gly Ala

		20						25					30				
Lys	Thr	Leu	Tyr	Ile	Gln	Arg	Ile	Lys	Asp	Arg	Pro	Ile	Asp	Lys	Gln		
		35					40					45					
Leu	Asn	Ile	Asp	Glu	Asn	Asp	Leu	Asn	Lys	Ile	Asp	Gln	Cys	Val	Leu		
	50					55					60						
Gln	Phe	Gly	Asp	Ile	Lys	Ile	Met	Ile	Ala	Asp	Asp	Thr	Glu	Gly	Leu		
65					70				75						80		
Pro	Ile	Thr	Gln	Gly	Asn	Asn	Ile	Ser	Leu	Cys	Leu	Thr	Phe	Asp	Gln		
			85					90					95				
Val	Glu	Glu	Thr	Lys	His	Val	Tyr	Asp	Gln	Leu	Ile	Glu	Lys	Gly	Ser		
		100						105					110				
Glu	Val	Leu	Lys	Thr	Phe	Ser	Pro	Glu	Phe	Tyr	Thr	Glu	Gly	Tyr	Gly		
	115						120					125					
Tyr	Val	Arg	Asp	Pro	Tyr	Gly	Ile	Ser	Leu	His	Leu	Phe	Thr	Lys	Arg		
	130					135					140						
Lys	Asn																
145																	

<210> 6833

<211> 173

<212> PRT

<213> S.epidermidis

<400> 6833

Arg	Ser	Glu	Asn	Phe	Met	Lys	Thr	Ile	Lys	Ser	Thr	Leu	Glu	Thr	Glu		
1			5						10					15			
Ala	Ile	Phe	Ser	Asp	Asp	Gln	Gln	His	Arg	Tyr	Leu	Leu	Lys	Lys	Thr		
		20						25					30				
Trp	Asn	Ser	Glu	Lys	Gln	Lys	Ile	Thr	Ile	Ile	Thr	Met	Tyr	Pro	Asn		
	35						40					45					
Tyr	Thr	Gly	Leu	Leu	Arg	Ile	Asp	Leu	Thr	Thr	Gln	Leu	Ile	Met	Asn		
	50					55					60						
Lys	Val	Ser	Glu	Met	Asp	Thr	Phe	Gly	Ser	Ile	Asn	Phe	Val	Asn	Leu		
65				70					75					80			
Tyr	Ser	Asn	Ile	Thr	Thr	Pro	Ile	Asn	Leu	Lys	His	Leu	Glu	Asn	Ala		
		85						90					95				
Tyr	Asp	Asn	His	Thr	Asp	Ile	Gln	Ile	Met	Lys	Ala	Val	Lys	Glu	Ser		
		100					105						110				
Asp	Glu	Val	Ile	Leu	Ala	Trp	Gly	Ala	Tyr	Ala	Lys	Lys	Pro	Val	Val		
	115						120					125					
Glu	Ser	Arg	Val	Asn	Glu	Val	Leu	Glu	Met	Leu	Lys	Pro	His	Lys	Lys		
	130					135					140						
Lys	Val	Lys	Arg	Leu	Met	Asn	Pro	Ala	Thr	Asn	Glu	Ile	Met	His	Pro		
145				150						155					160		
Leu	Asn	Pro	Lys	Ala	Arg	Gln	Lys	Trp	Thr	Leu	Lys	Ala					
			165						170								

<210> 6834

<211> 226

<212> PRT

<213> S.epidermidis

<400> 6834

Ser	Gly	Glu	Asn	Ile	Arg	Arg	Asn	Lys	Leu	Met	Lys	Asn	Ile	Ser	Glu		
1			5						10					15			
Phe	Ser	Ala	Gln	Leu	Asn	Gln	Thr	Phe	Asp	Gln	Gly	Glu	Ala	Val	Ser		

20 25 30
 Met Glu Trp Leu Phe Arg Pro Leu Leu Lys Met Leu Ala Glu Gly Asp
 35 40 45
 Pro Val Pro Val Glu Asp Ile Ala Ala Glu Thr Gly Lys Pro Val Glu
 50 55 60
 Glu Val Lys Gln Val Leu Gln Thr Leu Pro Ser Val Glu Leu Asp Glu
 65 70 75 80
 Gln Gly Arg Val Val Gly Tyr Gly Leu Thr Leu Val Pro Thr Pro His
 85 90 95
 Arg Phe Glu Val Asp Gly Lys Gln Leu Tyr Ala Trp Cys Ala Leu Asp
 100 105 110
 Thr Leu Met Phe Pro Ala Leu Ile Gly Arg Thr Val His Ile Ala Ser
 115 120 125
 Pro Cys His Gly Thr Gly Lys Ser Val Arg Leu Thr Val Glu Pro Asp
 130 135 140
 Arg Val Val Ser Val Glu Pro Ser Thr Ala Val Val Ser Ile Val Thr
 145 150 155 160
 Pro Asp Glu Met Ala Ser Val Arg Ser Ala Phe Cys Asn Asn Val His
 165 170 175
 Phe Phe Ser Ser Pro Ser Ala Ala Gln Asp Trp Leu Asn Gln His Pro
 180 185 190
 Glu Ser Ser Val Leu Pro Val Glu Asp Ala Phe Glu Leu Gly Arg His
 195 200 205
 Leu Gly Ala Arg Tyr Glu Glu Ser Gly Pro Thr Asn Gly Ser Cys Cys
 210 215 220
 Asn Ile
 225

<210> 6835

<211> 281

<212> PRT

<213> S.epidermidis

<400> 6835

Ile Met Glu Asn Leu Leu Glu Val Gln Gln Leu Asn Lys Ser Tyr Lys
 1 5 10 15
 Asn Ser Glu Phe Gln Leu Thr Asp Ile Thr Phe Ser Val Lys Pro Gly
 20 25 30
 Glu Val Val Gly Leu Ile Gly Lys Asn Gly Ser Gly Lys Ser Thr Leu
 35 40 45
 Ile Asn Thr Leu Val Gly Asn Arg His Lys Asp Asn Gly Ser Leu Lys
 50 55 60
 Phe Phe Asp Lys Glu Val Thr Glu Asn Asp Phe Lys Tyr Lys Glu His
 65 70 75 80
 Leu Gly Val Val Phe Asp Asp Leu Arg Val Pro Asp Lys Leu Thr Leu
 85 90 95
 Gln Tyr Ile Asn Lys Val Phe Thr Glu Ile Tyr Asp Ala Trp Asn Ser
 100 105 110
 Asp Thr Phe Phe Ser Leu Ile Lys Ala Phe Glu Leu Pro Thr Asn Asn
 115 120 125
 Gln Ile Lys Thr Phe Ser Arg Gly Met Arg Met Lys Ala Ala Leu Thr
 130 135 140
 Ile Ala Leu Ser His Asp Ala Lys Leu Leu Ile Leu Asp Glu Ala Thr
 145 150 155 160
 Ala Gly Met Asp Val Ser Gly Arg Glu His Val Leu Glu Ile Leu Glu
 165 170 175

275 280 285
 Lys Ile Glu Val Val Phe Lys Asn Thr Gly Thr Tyr Met Phe His Cys
 290 295 300
 His Ile Leu Glu His Glu Asp Asn Gly Met Met Gly Gln Ile Lys Val
 305 310 315 320
 Thr Asn

<210> 6837
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6837
 Ile Ile Arg Lys Gly Leu Ile Phe Leu Lys Tyr Phe Asn Val Lys Leu
 1 5 10 15
 His Met Asn Thr Lys Tyr Phe Gly Glu Thr Leu Glu Gly Thr Gly Gln
 20 25 30
 Ala Glu Asp Tyr Arg Leu Lys Leu Ser Pro Lys Lys Ala Ser Gln Gln
 35 40 45
 Tyr Glu Val Leu
 50

<210> 6838
 <211> 325
 <212> PRT
 <213> S.epidermidis

<400> 6838
 Ala Asp Arg Lys Met Ser Ile Ser Glu Tyr Lys Asn Arg Tyr Leu Glu
 1 5 10 15
 Ser Leu Tyr Asn Thr Phe Lys Thr Glu Leu Glu Asn Glu Arg Thr Arg
 20 25 30
 Tyr Phe Ile Leu Asp Thr Asn Tyr Thr Asn Ser Asp Asp Thr Glu Lys
 35 40 45
 Glu Phe Thr Trp Asp Val Lys Gln Asn Asn Lys Ile Arg Glu Gly Asp
 50 55 60
 Leu Phe Ile Phe Arg Arg Pro Thr Asn Leu Ser Gln Ile Ala Gln Gln
 65 70 75 80
 Phe Tyr Phe Phe Gly Ala Gly Lys Ile Glu Lys Ile Glu Arg Lys Asn
 85 90 95
 Asn Val Ala Thr Ala Tyr Ile Ser Lys Pro Leu Leu Phe Val Asp Arg
 100 105 110
 Val Leu Lys Asp Asn Ile Glu Asn Leu Lys Trp Glu Phe Lys Glu Arg
 115 120 125
 Ile Lys Glu Glu Trp Glu Gln Phe Phe Phe Lys Asn Lys Ile Ser Asn
 130 135 140
 Ile Thr Lys Asn Asp Phe Leu Lys Leu Leu Ser Leu Ser Arg Asn Val
 145 150 155 160
 Val Glu Ile Glu Ser Asn Tyr Ile Asn Asn Asp Ile Ser Leu Thr Phe
 165 170 175
 Lys Gln Met Ala Asp Met Ala Thr Arg Ile Lys Lys Asn Ile Tyr Tyr
 180 185 190
 Val Gly Asn His Glu Ala Phe Val Gln Ala Lys Gly Ser Ala His Phe
 195 200 205
 Glu Phe Ser Lys Arg Ile Lys Gln Asn Tyr Ser Tyr Arg Cys Ala Ile

```

      210                      215                      220
Thr Gly Ile Lys Thr Lys Asp Phe Leu Val Val Thr His Ile Ile Pro
225                      230                      235                      240
Trp His Glu Asn Glu Phe Ile Arg Leu Asp Pro Ser Asn Gly Ile Cys
      245                      250                      255
Leu Ser Leu Phe Leu Ala Lys Ala Phe Lys Lys Gly Phe Ile Thr Phe
      260                      265                      270
Ser Asn Ser Tyr Arg Val Val Leu Ser Lys Glu Ala Glu Lys Asp Ala
      275                      280                      285
Ala Leu Tyr Glu Glu Leu Lys Ile Tyr Glu Asn Gln Lys Ile Glu Leu
      290                      295                      300
Pro Asp Cys Gln Lys Pro Asn Leu Lys Tyr Leu Asp Trp His Arg Glu
305                      310                      315                      320
His Ile Phe Lys Asn
      325

```

<210> 6839
 <211> 169
 <212> PRT
 <213> S.epidermidis

```

<400> 6839
Arg Tyr Met Asn Thr Ile Lys Ser Thr Ile His Thr Glu Ala Ile Phe
1                      5                      10                      15
Ser Asp Asp Glu Gln His Arg Tyr Leu Leu Lys Lys Ile Trp Asp Asp
      20                      25                      30
Lys Lys Pro Ala Cys Thr Val Ile Thr Met Tyr Leu His Leu Asp Gly
      35                      40                      45
Val Leu Ser Leu Asp Leu Thr Thr Val Leu Ile Leu Asn Gln Leu Ala
      50                      55                      60
Asn Ser Glu Gln Tyr Gly Ala Val Tyr Leu Val Asn Leu Phe Ser Asn
65                      70                      75                      80
Ile Lys Thr Pro Glu Asn Leu Lys His Ile Lys Glu Pro Tyr Asp Glu
      85                      90                      95
His Thr Asp Ile His Leu Met Lys Ala Ile Ser Glu Ser Asp Thr Val
      100                      105                      110
Ile Leu Ala Tyr Gly Ala Tyr Ala Lys Arg Pro Val Val Ile Asp Arg
      115                      120                      125
Val Glu Gln Val Met Glu Met Leu Lys Pro His Lys Lys Lys Val Lys
      130                      135                      140
Lys Leu Ile Asn Pro Val Thr Asn Glu Val Met His Pro Leu Asn Pro
145                      150                      155                      160
Lys Ala Arg Gln Lys Trp Thr Leu Lys
      165

```

<210> 6840
 <211> 150
 <212> PRT
 <213> S.epidermidis

```

<400> 6840
Arg Arg Met Lys Val Ile Phe Thr Gln Asp Val Lys Gly Lys Gly Lys
1                      5                      10                      15
Lys Gly Glu Val Lys Asp Val Pro Val Gly Tyr Ala Asn Asn Phe Leu
      20                      25                      30
Leu Lys Asn Lys Tyr Ala Val Glu Ala Thr Pro Gly Asn Leu Lys Gln

```


<400> 6842

```

Ser Val Met Lys Asn Phe Ile Leu Ser Val Gln His Leu Leu Ala Met
1      5      10      15
Tyr Ala Gly Ala Ile Leu Val Pro Ile Ile Val Gly Thr Ser Leu Lys
      20      25      30
Phe Ser Ala Glu Glu Ile Ala Tyr Leu Val Thr Val Asp Ile Phe Met
      35      40      45
Cys Gly Val Ala Thr Phe Leu Gln Ala Asn Lys Val Thr Gly Thr Gly
      50      55      60
Leu Pro Ile Val Leu Gly Cys Thr Phe Thr Ala Val Ala Pro Met Ile
      65      70      75      80
Leu Ile Gly Gln Thr Lys Gly Leu Asp Val Leu Tyr Gly Ser Leu Leu
      85      90      95
Ile Ser Gly Ile Leu Val Val Leu Ile Ala Pro Phe Phe Ser Tyr Leu
      100      105      110
Val Lys Phe Phe Pro Pro Val Val Thr Gly Ser Val Val Thr Ile Ile
      115      120      125
Gly Ile Asn Leu Met Pro Val Ala Met Asn Tyr Leu Ala Gly Gly Glu
      130      135      140
Gly Ala Lys Asn Tyr Gly Asp Thr Lys Asn Leu Ile Leu Gly Gly Val
      145      150      155      160
Thr Leu Leu Ile Ile Leu Ile Leu Gln Arg Phe Thr Lys Gly Phe Leu
      165      170      175
Lys Ser Ile Ala Ile Leu Ile Gly Leu Ala Ile Gly Thr Ala Leu Ala
      180      185      190
Gly Ile Phe Gly Met Val Asp Ile Lys Gln Val Gly Asp Ala His Trp
      195      200      205
Phe Gly Phe Pro Val Pro Phe Arg Phe Ser Gly Phe Gly Phe Asp Val
      210      215      220
Ser Ser Ile Leu Val Phe Phe Ile Val Ala Val Val Ser Leu Ile Glu
      225      230      235      240
Ser Thr Gly Val Tyr His Ala Leu Ser Glu Ile Thr Gly Arg Lys Leu
      245      250      255
Glu Arg Lys Asp Phe Arg Lys Gly Tyr Thr Ala Glu Gly Leu Ala Ile
      260      265      270
Ile Leu Gly Ser Ile Phe Asn Ala Phe Pro Tyr Thr Ala Tyr Ser Gln
      275      280      285
Asn Val Gly Leu Val Ser Leu Ser Gly Ala Lys Lys Asn Asn Val Ile
      290      295      300
Tyr Gly Met Val Ile Leu Leu Leu Ile Cys Gly Cys Ile Pro Lys Leu
      305      310      315      320
Gly Ala Leu Ala Asn Ile Ile Pro Leu Pro Val Leu Gly Gly Ala Met
      325      330      335
Ile Ala Met Phe Gly Met Val Met Ala Tyr Gly Val Ser Ile Leu Gly
      340      345      350
Asn Ile Asn Phe Gln Asn Gln Asn Asn Leu Leu Ile Ile Ala Ile Ser
      355      360      365
Val Gly Leu Gly Ala Gly Ile Ser Ala Val Pro Gln Ala Phe Lys Gly
      370      375      380
Leu Gly Glu Gln Phe Ala Trp Leu Thr Gln Asn Gly Ile Val Leu Gly
      385      390      395      400
Ala Ile Ser Ala Ile Ile Leu Asn Phe Phe Phe Asn Gly Ile Lys Tyr
      405      410      415
Lys Gln Thr Glu Glu Asn Val Lys
      420

```

<210> 6843
 <211> 1041
 <212> PRT
 <213> S.epidermidis

<400> 6843

```

Ile Val Met Asn Phe Gln Phe Asn Glu Asp Asp Leu Glu Gln Val Ala
1      5      10      15
Leu Glu Trp Leu Gln Ser Leu Gly Tyr Asp Tyr Lys Lys Gly Asn Glu
20     25     30
Ile Ser Met Thr Gly Leu Thr Pro Glu Arg Lys Ser Asp Lys Asp Val
35     40     45
Val Leu His Glu Arg Leu Glu Lys Ala Leu Arg Lys Ile Asn Ser Asp
50     55     60
Ile His Pro Arg Phe Ile Glu Lys Ala Ile His Glu Leu Thr Leu Glu
65     70     75     80
Lys Ser Pro Asn Leu Leu Glu Asn Asn Leu Thr Phe His Glu Asn Leu
85     90     95
Ile Asn Gly Ile Glu Ile Glu Asp Tyr Asp Asp Glu Gly Gln Ser Val
100    105    110
Val Glu Ile Val Lys Ile Val Asp Phe Glu Tyr Pro Gln Asn Asn Asp
115    120    125
Phe Leu Ala Val Asn Gln Phe Thr Val Val Asn Gly Asp Tyr Thr Lys
130    135    140
Arg Pro Asp Ile Val Leu Phe Ile Asn Gly Leu Pro Ile Val Val Ile
145    150    155    160
Glu Leu Lys Asn Ser Thr Ile Glu Thr Val Gly Val Glu Asp Gly Tyr
165    170    175
Arg Gln Leu Glu Thr Tyr Lys Met Arg Ile Pro Gln Leu Phe Thr Phe
180    185    190
Asn Glu Val Leu Val Thr Ser Asp Gly Ile Asn Thr Lys Ala Gly Ser
195    200    205
Leu Thr Ala Asn Tyr Asp Arg Phe Met Thr Trp Arg Ser Lys Asp Gly
210    215    220
Glu Thr Glu Ser Ser Ser Ser Leu Ala Ser Leu Asp Val Leu Ile His
225    230    235    240
Gly Met Leu Asn Pro Glu Thr Leu Leu Asp Leu Ile Arg Tyr Phe Val
245    250    255
Leu Phe Gln Asp Asp Gly Lys Gly His Ile Ser Lys Ile Leu Ala Ala
260    265    270
Tyr His Gln Tyr Tyr Ala Val Asn Lys Ala Val Asp Arg Ala Leu Leu
275    280    285
Ala Ser Ser Gly Gln Gly Asp Gly Lys Gly Gly Val Ile Trp His Thr
290    295    300
Gln Gly Ser Gly Lys Ser Leu Thr Met Val Phe Phe Ser Gly Lys Leu
305    310    315    320
Ile Gln Met Leu Asn Asn Pro Thr Leu Val Val Val Thr Asp Arg Asn
325    330    335
Asp Leu Asp Asn Gln Leu Tyr Ser Thr Phe Val Lys Ser Lys Gly Arg
340    345    350
Ser Gly Lys Gly Leu Leu Arg Gln Thr Pro Lys Gln Ala Glu Thr Arg
355    360    365
Lys Glu Leu Lys Ser Leu Leu Ser Val Glu Ser Gly Gly Ile Val Phe
370    375    380
Thr Thr Met Gln Lys Phe Glu Pro Glu Gln Asn Glu Thr Thr Met Ser
385    390    395    400

```

Ala Leu Thr Glu Arg Lys Asn Val Ile Val Met Ala Asp Glu Ala His
 405 410 415
 Arg Thr Gln Tyr Gly Phe Asn Ala Lys Tyr Asp Asp Lys Gly Glu Gly
 420 425 430
 Ile Lys Tyr Gly Tyr Ala Lys Tyr Leu Arg Asp Ala Leu Pro Asn Ala
 435 440 445
 Thr Phe Val Gly Phe Thr Gly Thr Pro Val Ala Ser Thr Asp Lys Asn
 450 455 460
 Thr Gln Met Val Phe Gly Asn Tyr Ile Asp Val Tyr Asp Met Thr Gln
 465 470 475 480
 Ala Val Ala Asp Gly Ser Thr Val Lys Ile Tyr Tyr Glu Ser Arg Ile
 485 490 495
 Ile Pro Leu Asn Leu Pro Gln Asn Leu Asp Leu Asp Glu Ala Tyr Asn
 500 505 510
 Asp Ile Thr Glu Asp Gln Glu Glu Asp Val Lys Gln Arg Leu Lys Ser
 515 520 525
 Lys Trp Ser Arg Ile Glu Ala Leu Ala Gly Ala Lys Pro Arg Val Glu
 530 535 540
 Ala Leu Ala Lys Asp Ile Ile Gln His Phe Glu Thr Arg Gln Gln Ala
 545 550 555 560
 Met Lys Gly Lys Gly Met Ile Val Thr Met Ser Arg Arg Ile Ala Val
 565 570 575
 Asp Leu Tyr Asp Glu Ile Ile Arg Leu Lys Pro Glu Trp His Ser Asp
 580 585 590
 Asp Asp Asp Lys Gly Val Ile Lys Val Val Met Thr Gly Ser Ser Met
 595 600 605
 His Pro Ile Ser Phe Gln Arg His Ile Gly Pro Lys Lys Arg Arg Asn
 610 615 620
 Leu Leu Glu Lys Arg Met Lys Asp Met Asn Asp Glu Leu Gln Leu Val
 625 630 635 640
 Ile Val Arg Asp Met Trp Leu Thr Gly Phe Asp Val Pro Ser Met His
 645 650 655
 Thr Met Tyr Ile Asp Lys Pro Met Lys Gly His Asn Leu Met Gln Ala
 660 665 670
 Ile Ala Arg Val Asn Arg Val Phe Lys Asp Lys Pro Gly Gly Leu Ile
 675 680 685
 Val Asp Tyr Val Gly Ile Ala Glu Ser Leu Lys Glu Ala Leu Lys Glu
 690 695 700
 Tyr Thr Glu Ser Asp Gln Ala Gln Thr Ala Ile Asp Thr Asp Lys Ala
 705 710 715 720
 Val Glu Leu Met Leu Leu Lys Tyr Asp Val Ile Gln Asp Met Leu Tyr
 725 730 735
 Asn Leu Asp Tyr Ser Lys Phe Asn Ser Glu Lys Lys Ser Glu Arg Tyr
 740 745 750
 Tyr Ala Ile Ser Asp Thr Met Asp Tyr Val Ile Gly Leu Gly Glu Asp
 755 760 765
 Glu Arg Gln Arg Phe Ile Lys Thr Val Thr Glu Leu Gly Lys Ala Phe
 770 775 780
 Ala Leu Cys Ala Thr Glu Pro Thr Ala Gln Glu Leu Asn Asp Glu Ile
 785 790 795 800
 Ala Phe Phe Lys Ala Val Lys Ala Gly Leu Val Lys Leu Leu Gln Pro
 805 810 815
 Pro Lys Glu Gly Lys Thr Arg Lys Thr Pro Ala Glu Val Glu Ala Glu
 820 825 830
 Ile Asn Gln Leu Val Ser Gln Ser Val Val Thr Glu Asp Val Ile Asp
 835 840 845

Val Tyr Gln Thr Leu Gly Leu Glu Gln Pro Asp Leu Ser Ile Leu Ser
 850 855 860
 Asp Asp Phe Leu Lys Asp Val Glu Gly Leu Lys Gln Lys Asn Val Ala
 865 870 875 880
 Val Glu Leu Leu Asn Arg Leu Leu Lys Gly Gln Val Lys Ser Leu Met
 885 890 895
 Lys Thr Asn Ala Thr Val Ser Lys Arg Phe Ser Glu Met Leu Gly Asn
 900 905 910
 Ser Ile Asn Lys Tyr Asn Ser Arg Ser Ile Glu Thr Ser Lys Val Ile
 915 920 925
 Glu Glu Leu Ile Gln Leu Ala Lys Asp Ile Lys Gln Glu Gln Gln Arg
 930 935 940
 Gly Asn Glu Leu Gly Leu Asn Ser Asp Glu Ile Ala Phe Tyr Asp Ala
 945 950 955 960
 Leu Ala Ser His Glu Thr Ala Lys Glu Ala Met Gly Asp Lys Glu Leu
 965 970 975
 Arg Ala Ile Ala His Glu Leu Thr Lys Thr Val Lys Glu Asn Met Gly
 980 985 990
 Val Asp Trp Ser Lys Arg Asp Ser Ala Lys Ala Lys Met Arg Val Ala
 995 1000 1005
 Val Arg Arg Leu Leu Lys Lys Tyr Gly Tyr Pro Pro Asp Leu Gln Lys
 1010 1015 1020
 Met Ala Val Glu Gln Val Val Glu Gln Ala Glu Leu Met Ala Ser Asn
 1025 1030 1035 1040
 Gln

<210> 6844

<211> 112

<212> PRT

<213> S.epidermidis

<400> 6844

Lys Ser Gln Asn Glu Arg Lys Ser Leu Met Asn Arg Tyr Ile Thr Gln
 1 5 10 15
 Gly Ile Ala Asn Asn Leu Pro Ile Ile Leu Gln Gln Gln Leu Trp Lys
 20 25 30
 Ile Val Ala Gln Arg Glu Asn Glu Gln Ser Lys Glu Leu Glu Ala Ile
 35 40 45
 Asp Tyr Phe His Ile Phe Gln Phe Asn Met His Asn Asp Gln Leu Tyr
 50 55 60
 Ile Lys His Lys Gln Glu Arg Pro Glu Tyr Ile Lys Thr His Lys Ala
 65 70 75 80
 Asn Tyr Ser Lys Ala Ile Asn Ile Asn Lys Val Tyr Ile Ile Arg Glu
 85 90 95
 Asp Asp Val Asp Leu Ser Tyr Tyr Val Met Leu Leu Pro Glu Glu Tyr
 100 105 110

<210> 6845

<211> 82

<212> PRT

<213> S.epidermidis

<400> 6845

Leu Ile Lys Lys Met Asp Glu Asp Lys Gly Thr Gly Lys Ile Leu Ser
 1 5 10 15

Ser Leu Tyr Ile Lys Asp Asp Glu Leu Lys Lys Gln Tyr Ser Thr Cys
 20 25 30
 Arg Glu Phe Leu Asp Asp Tyr Leu Tyr Thr Ala Trp Ile Ile Pro Val
 35 40 45
 Leu Leu Asn Glu His Ala Thr Ser Gln Leu Glu Glu Tyr Leu Gly Arg
 50 55 60
 Tyr Leu Ile Asn Gln Asn Val Pro Ile Leu Asn Leu Leu Ser His Thr
 65 70 75 80
 Phe Lys

<210> 6846
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 6846
 Asn Val Lys Lys Ala Cys Glu Phe Cys Leu Ile Arg Ala Leu Arg Ala
 1 5 10 15
 Leu Asn Glu Met Ile Asn Ile Ile Leu Ser Pro Ile Asn Met Asn Val
 20 25 30
 Lys Lys Leu Ser Asn Ser Tyr Leu Ser Ile Phe Ala Val Asn His Ile
 35 40 45

<210> 6847
 <211> 60
 <212> PRT
 <213> S.epidermidis

<400> 6847
 Ile Val Glu Lys Leu Lys Thr Leu Leu Asn Leu Ser His Phe Ile Phe
 1 5 10 15
 Leu Tyr Thr Val Ser Arg Thr Gln His Thr Thr Asn Glu Phe Gln Lys
 20 25 30
 Val Arg Val Lys Leu Thr Cys Phe Phe Tyr Gly Phe Lys Ile Leu Glu
 35 40 45
 Ser Gly Gln Ser Thr Pro Leu Tyr Asn Tyr Lys Lys
 50 55 60

<210> 6848
 <211> 648
 <212> PRT
 <213> S.epidermidis

<400> 6848
 Ser Asn Glu Lys Val Met Val Asn Thr Leu Ser Asp Val Asn Asn Thr
 1 5 10 15
 Asp Asn Tyr Gly Ala Gly Gln Ile Gln Val Leu Glu Gly Leu Glu Ala
 20 25 30
 Val Arg Lys Arg Pro Gly Met Tyr Ile Gly Ser Thr Ser Glu Arg Gly
 35 40 45
 Leu His His Leu Val Trp Glu Ile Val Asp Asn Ser Ile Asp Glu Ala
 50 55 60
 Leu Ala Gly Tyr Ala Ser His Ile Glu Val Val Ile Glu Lys Asp Asn
 65 70 75 80
 Trp Ile Lys Val Thr Asp Asn Gly Arg Gly Ile Pro Val Asp Ile Gln

				85					90					95			
Glu	Lys	Met	Gly	Arg	Pro	Ala	Val	Glu	Val	Ile	Leu	Thr	Val	Leu	His		
			100					105					110				
Ala	Gly	Gly	Lys	Phe	Gly	Gly	Gly	Gly	Tyr	Lys	Val	Ser	Gly	Gly	Leu		
		115					120					125					
His	Gly	Val	Gly	Ser	Ser	Val	Val	Asn	Ala	Leu	Ser	Gln	Asp	Leu	Glu		
		130				135					140						
Val	Tyr	Val	His	Arg	Asn	Gly	Thr	Ile	Tyr	His	Gln	Ala	Tyr	Lys	Gln		
145					150					155					160		
Gly	Val	Pro	Gln	Phe	Asp	Leu	Lys	Glu	Ile	Gly	Asp	Thr	Asp	Lys	Thr		
				165				170						175			
Gly	Thr	Ala	Ile	Arg	Phe	Lys	Ala	Asp	Lys	Glu	Ile	Phe	Thr	Glu	Thr		
			180					185					190				
Thr	Val	Tyr	Asn	Tyr	Glu	Thr	Leu	Gln	Lys	Arg	Ile	Arg	Glu	Leu	Ala		
		195				200						205					
Phe	Leu	Asn	Lys	Gly	Ile	Gln	Ile	Thr	Leu	Lys	Asp	Glu	Arg	Glu	Glu		
	210					215					220						
Glu	Val	Arg	Glu	Asp	Ser	Tyr	His	Tyr	Glu	Gly	Gly	Ile	Lys	Ser	Tyr		
225					230					235					240		
Val	Asp	Leu	Leu	Asn	Glu	Asn	Lys	Glu	Pro	Leu	His	Asp	Glu	Pro	Ile		
				245				250					255				
Tyr	Ile	His	Gln	Ser	Lys	Asp	Asp	Ile	Glu	Val	Glu	Ile	Ala	Leu	Gln		
			260					265					270				
Tyr	Asn	Ser	Gly	Tyr	Ala	Thr	Asn	Leu	Leu	Thr	Tyr	Ala	Asn	Asn	Ile		
		275					280					285					
His	Thr	Tyr	Glu	Gly	Gly	Thr	His	Glu	Asp	Gly	Phe	Lys	Arg	Ala	Leu		
	290					295					300						
Thr	Arg	Val	Leu	Asn	Ser	Tyr	Gly	Thr	Gln	Ser	Lys	Ile	Ile	Lys	Glu		
305				310						315					320		
Asp	Lys	Asp	Arg	Leu	Ser	Gly	Glu	Asp	Thr	Arg	Glu	Gly	Leu	Thr	Ala		
				325					330					335			
Val	Val	Ser	Ile	Lys	His	Gly	Asp	Pro	Gln	Phe	Glu	Gly	Gln	Thr	Lys		
			340					345					350				
Thr	Lys	Leu	Gly	Asn	Ser	Glu	Val	Arg	Gln	Val	Val	Asp	Arg	Leu	Phe		
		355					360					365					
Ser	Glu	His	Phe	Glu	Arg	Phe	Leu	Tyr	Glu	Asn	Pro	Ser	Val	Gly	Arg		
	370					375					380						
Ile	Ile	Val	Glu	Lys	Gly	Ile	Met	Ala	Ser	Arg	Ala	Arg	Val	Ala	Ala		
385					390					395					400		
Lys	Lys	Ala	Arg	Glu	Val	Thr	Arg	Arg	Lys	Ser	Ala	Leu	Asp	Val	Ser		
				405					410					415			
Ser	Leu	Pro	Gly	Lys	Leu	Ala	Asp	Cys	Ser	Ser	Lys	Asn	Pro	Glu	Glu		
			420					425					430				
Ser	Glu	Ile	Phe	Leu	Val	Glu	Gly	Asp	Ser	Ala	Gly	Gly	Ser	Thr	Lys		
	435						440					445					
Ser	Gly	Arg	Asp	Ser	Arg	Thr	Gln	Ala	Ile	Leu	Pro	Leu	Arg	Gly	Lys		
	450					455					460						
Ile	Leu	Asn	Val	Glu	Lys	Ala	Arg	Leu	Asp	Arg	Ile	Leu	Asn	Asn	Asn		
465					470					475					480		
Glu	Ile	Arg	Gln	Met	Ile	Thr	Ala	Phe	Gly	Thr	Gly	Ile	Gly	Gly	Glu		
				485					490					495			
Phe	Asp	Ile	Ser	Lys	Ala	Arg	Tyr	His	Lys	Ile	Val	Ile	Met	Thr	Asp		
			500					505					510				
Ala	Asp	Val	Asp	Gly	Ala	His	Ile	Arg	Thr	Leu	Leu	Leu	Thr	Phe	Phe		
		515					520					525					
Tyr	Arg	Phe	Met	Arg	Pro	Leu	Ile	Glu	Ala	Gly	Tyr	Val	Tyr	Ile	Ala		

530 535 540
 Gln Pro Pro Leu Tyr Lys Leu Thr Gln Gly Lys Gln Lys Tyr Tyr Val
 545 550 555 560
 Phe Asn Asp Arg Glu Leu Asp Lys Leu Lys Gln Glu Leu Asn Pro Ser
 565 570 575
 Pro Lys Trp Ser Ile Ala Arg Tyr Lys Gly Leu Gly Glu Met Asn Ala
 580 585 590
 Asp Gln Leu Trp Glu Thr Thr Met Asn Pro Glu His Arg Ser Met Leu
 595 600 605
 Gln Val Arg Leu Glu Asp Ala Ile Asp Ala Asp Gln Thr Phe Glu Met
 610 615 620
 Leu Met Gly Asp Val Val Glu Asn Arg Arg Gln Phe Ile Glu Asp Asn
 625 630 635 640
 Ala Val Tyr Ala Asn Leu Asp Phe
 645

<210> 6849
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6849
 Phe Val Trp Asn Cys Val Lys Lys Ser Asp Lys Asn Pro Cys Ile Met
 1 5 10 15
 Asn Asp Leu Thr Ile Tyr Lys Gln Leu Gln Ser Asn Ile Glu Trp Asn
 20 25 30
 Val Asn Ser Phe Leu Asp Thr Phe His Val Tyr Ile Phe Ile Arg His
 35 40 45
 Trp Arg
 50

<210> 6850
 <211> 263
 <212> PRT
 <213> S.epidermidis

<400> 6850
 Met Asn Trp Lys Leu Thr Lys Thr Leu Phe Ile Phe Val Phe Ile Leu
 1 5 10 15
 Val Asn Ile Phe Leu Val Ile Val Tyr Ile Asp Lys Val Asn Lys Ser
 20 25 30
 Gln Val Asn Asp Ser Glu Lys Val Asn Glu Val Asn Phe Gln Gln Glu
 35 40 45
 Glu Ile Asp Val Pro Lys Asp Val Leu Asn Gln Ser Val Lys Asp Thr
 50 55 60
 Glu Leu Glu Gln Ile Thr Ala Arg Ser Lys Asn Phe Ser Ser Tyr Ala
 65 70 75 80
 Lys Asp His Ser Ser Leu Gln Thr Ser Asp Ser Asp Lys Thr Leu Glu
 85 90 95
 Gly Asp Ile Asp Lys Gly Val Gln Val Ser Asp Lys Asn Leu Gln Asp
 100 105 110
 Ile Lys Glu Tyr Ile Ala Lys Lys Ile Phe Asn Gly Lys Glu Tyr Gln
 115 120 125
 Leu Ser Asp Leu Thr Lys Asp Lys Val Thr Tyr Glu Gln Thr Tyr Lys
 130 135 140
 Asp Tyr Pro Ile Met Asn Asn Ser Lys Ala Arg Leu Thr Phe Asn Leu

145 150 155 160
 Ser Asp Gly Lys Ala Thr Ser Tyr Lys Gln Thr Ala Met Asp Asp Ile
 165 170 175
 Gln Val Ala Lys Gly Ser Asn Ser Thr Lys Lys Gln Val Ile Thr Pro
 180 185 190
 Arg Lys Ala Ile Glu Ala Leu Tyr Tyr Asn Arg Tyr Leu Lys Gln Asn
 195 200 205
 Asp Gln Val Leu Asp Ala Arg Leu Gly Tyr Tyr Ser Val Val Lys Glu
 210 215 220
 Thr Asn Val Gln Leu Leu Gln Pro Asn Trp Glu Ile Lys Val Lys His
 225 230 235 240
 Lys Gly Lys Asp Glu Val Gln Thr Tyr Tyr Val Glu Ala Thr Asn His
 245 250 255
 Asn Pro Lys Val Ile Asp Tyr
 260

<210> 6851
 <211> 61
 <212> PRT
 <213> S.epidermidis

<400> 6851
 Ile His Arg Leu Val Lys Met Met Asp Phe Phe Lys Leu Trp Met Arg
 1 5 10 15
 Tyr Arg Val Ser Leu Asp Lys Asn Arg Glu Asn Leu Leu Lys Ser Asp
 20 25 30
 Phe Cys Glu Glu Asp Asn Asp Asp Lys Glu Ile Arg Ser Tyr Cys Asp
 35 40 45
 Trp Tyr Arg Phe Cys Gly Val Asn His Ser Ser Lys Met
 50 55 60

<210> 6852
 <211> 304
 <212> PRT
 <213> S.epidermidis

<400> 6852
 Met Asn Tyr Glu Lys Asn Glu Arg Glu Gly Ile Phe Tyr Met Asn Gln
 1 5 10 15
 Leu Lys His Ile Leu Ser Ser Leu Phe Glu Pro Leu Thr Lys Val Glu
 20 25 30
 Thr Tyr Glu Asn Leu Ile Thr Lys Val Ile Met Ile Leu Ile Tyr Ile
 35 40 45
 Leu Val Ala Ile Val Val Ile Ala Ile Leu Asn Lys Ile Ile Glu Gln
 50 55 60
 Ala Phe Lys Ile Gln Asn Lys Ser Lys Lys Gly Asn Lys Lys Arg Ser
 65 70 75 80
 Lys Thr Leu Ile Ser Leu Val Gln Asn Ile Val Lys Tyr Ile Val Trp
 85 90 95
 Phe Val Val Ile Thr Thr Ile Leu Ser Lys Phe Gly Ile Ser Val Glu
 100 105 110
 Gly Ile Ile Ala Ser Ala Gly Val Val Gly Ile Ala Val Gly Phe Gly
 115 120 125
 Ala Gln Thr Ile Val Lys Asp Ile Ile Thr Gly Phe Phe Ile Ile Phe
 130 135 140
 Glu Asn Gln Phe Asp Val Gly Asp Tyr Val Lys Ile Asn Ser Ser Gly

145 150 155 160
 Thr Thr Val Ala Glu Gly Thr Val Lys Ser Ile Gly Leu Arg Ser Thr
 165 170 175
 Arg Ile Asn Thr Ile Ser Gly Glu Leu Thr Ile Leu Pro Asn Gly Ser
 180 185 190
 Met Gly Glu Ile Thr Asn Phe Ser Ile Thr Asn Gly Thr Ala Ile Val
 195 200 205
 Glu Leu Pro Val Ser Val Asp Glu Asn Ile Asp Gln Val Glu Lys Lys
 210 215 220
 Leu Asn Arg Leu Phe Val Ser Leu Arg Ser Lys Tyr Tyr Leu Phe Val
 225 230 235 240
 Ser Asp Pro Val Val Asp Gly Ile Asp Ala Ile Glu Ser Asn Lys Val
 245 250 255
 Thr Ile Arg Ile Ser Ala Glu Thr Ile Pro Gly Glu Gly Phe Ser Gly
 260 265 270
 Ala Arg Ile Ile Arg Lys Glu Ala Gln Lys Met Phe Arg Gln Glu Gly
 275 280 285
 Ile Arg Met Pro Gln Pro Val Ile Ser Asn Tyr Asn Glu Glu Lys Ser
 290 295 300

<210> 6853
 <211> 70
 <212> PRT
 <213> S.epidermidis

<400> 6853
 Asn Thr Tyr Glu Val Phe Phe Met Arg Leu Asn Leu Asp Trp Asn Lys
 1 5 10 15
 Asp Phe Gln Glu Phe Gln Asp Ile Leu Asn Ser Gly Ile His Pro Glu
 20 25 30
 Trp Leu Tyr Cys Ala Lys Ala Asn Leu Val Leu Glu Pro Ala Tyr Thr
 35 40 45
 Gly Glu Gly Lys Gln Phe Phe Ser Thr Gln Asp Ile Ile Lys Ala Ser
 50 55 60
 Lys Ile Ile Pro Phe Phe
 65 70

<210> 6854
 <211> 308
 <212> PRT
 <213> S.epidermidis

<400> 6854
 Leu Lys Tyr Glu Gly Thr Phe Ser Met Leu Thr Lys Glu Phe Ala Gln
 1 5 10 15
 Arg Val Glu Leu Ser Glu Lys Gln Val Arg Lys Ile Val Gln His Leu
 20 25 30
 Glu Glu Arg Gly Tyr His Leu Ser Lys Thr Glu Tyr Arg Gly Arg Glu
 35 40 45
 Ala Thr Asp Phe Lys Glu Asp Asp Ile Glu Leu Phe Thr Asp Ile Ala
 50 55 60
 Asn Lys Val Lys Gln Thr Asn Ser Tyr Asp Leu Ala Phe Glu Glu Leu
 65 70 75 80
 Glu Lys Glu Lys Asp Phe Leu Gln Val Ile Val Lys Asp Glu Asp Ser
 85 90 95
 Gln Leu Pro Thr Asp Gln Asn Val Ala Gln Leu Val Glu Asp Leu Arg

100 105 110
 Ser Glu Ile Gln Lys Met Arg Glu Glu Arg Gln Met Leu Gly Gln Met
 115 120 125
 Ile Asn Gln Val His Gln Gln Gln Gln Glu Leu Lys Glu Leu Gln Thr
 130 135 140
 Asp Ile Thr Thr Lys Leu Asp Ser Asn Ala Gln Ser Leu Lys Ser Ile
 145 150 155 160
 Gln Asn Ser Gln Glu Val Ile Gln Ser Ala Gln Glu Gln Gln Ser Lys
 165 170 175
 Asp Ile Ala Lys Ala Asn Glu Leu Lys Asp Ser Glu Leu Arg Ser His
 180 185 190
 Phe Asp Ser Met Ser Asn Ser Ala Ser Ile Ser Gln Ser Asn Val Ala
 195 200 205
 Ser Gln Ser Thr Thr Ala Ser Leu Asn Gln Ser Glu Ser Ala Asn Asp
 210 215 220
 Ser Met Ser Ser Ser Leu Ser Glu Ser Asn Ser Ile Thr Ser Glu Ser
 225 230 235 240
 Asn Thr Asn Ser Lys Ser Glu Ile Glu Ser Lys Ser Thr Ser Thr Ser
 245 250 255
 Glu Phe Leu Ser Glu Ser Gly Ser Val Ser Asn Ser Glu Lys Ser Glu
 260 265 270
 Ser Ile Ser His Ser Gln Ser Thr Ser Ala Thr Pro Ser Ser Gln Ser
 275 280 285
 Thr Tyr Gln Gln Gln Pro Lys Glu Glu Lys Lys Gly Phe Phe Ala Arg
 290 295 300
 Leu Phe Asn Leu
 305

<210> 6855

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6855

Asn Phe His Asp Asp Val His Gly His Tyr Asp Asp Tyr Val Ile His
 1 5 10 15
 Gly Tyr His Asp Ala Cys Asp Trp Asn Asp Ser Cys Asp Phe Asp Asp
 20 25 30
 Tyr Ala Leu His Tyr Tyr Tyr Ser Asn
 35 40

<210> 6856

<211> 120

<212> PRT

<213> S.epidermidis

<400> 6856

Gly Gly Asn Asp Met Lys Thr Thr Thr Gln Glu Leu Lys Gln Tyr Met
 1 5 10 15
 Thr Arg Leu Phe Gln Leu Ser Asn Asn Glu Thr Trp Glu Cys Glu Thr
 20 25 30
 Leu Glu Glu Ala Ala Glu Asn Ile Leu Pro Lys Arg Phe Ile Asn Asp
 35 40 45
 Ser Pro Leu Ala His Leu Ile Leu Glu Thr Tyr Thr Tyr Tyr Asn Asn
 50 55 60
 Glu Leu His Glu Leu Ser Ile Tyr Pro Phe Leu Met Tyr Ser Asn Asn

3072

65					70					75				80	
Gln	Leu	Ile	Ser	Ile	Gly	Tyr	Leu	Asp	His	Phe	Asp	Met	Asp	Phe	Leu
				85					90					95	
Tyr	Leu	Thr	Asp	Thr	Lys	Asn	Thr	Ile	Ile	Asp	Glu	Arg	His	Leu	Leu
			100					105					110		
Lys	Glu	Gly	Gly	Asn	Asn	His	Glu								
		115					120								

<210> 6857
 <211> 258
 <212> PRT
 <213> S.epidermidis

<400> 6857

Ile	Met	Asn	Asp	Leu	Leu	Lys	Ile	Tyr	Glu	Lys	Leu	Lys	Lys	Asp	Ile
1				5					10					15	
Glu	Asn	Arg	Trp	Leu	Ile	Pro	Phe	His	Tyr	Val	Val	Phe	Gly	Leu	Ala
			20					25					30		
Leu	Val	Val	Tyr	Phe	Leu	Glu	Ile	Pro	Ile	Tyr	Lys	Leu	Val	Asn	Asn
			35				40					45			
Leu	Asp	Lys	Glu	Leu	Val	Asp	Lys	Val	Leu	Tyr	Ala	Phe	Ser	Leu	Val
	50					55					60				
Tyr	Asp	His	Ile	Val	Leu	Ile	Phe	Ile	Leu	Ile	Ile	Ile	Ile	Ile	Leu
65				70					75						80
Ile	Val	Tyr	Leu	Phe	Phe	Asp	Val	Phe	Asn	Met	Asn	Arg	Phe	Val	Pro
			85					90					95		
Ser	Pro	Thr	Thr	Tyr	Val	Asp	Gly	Ser	Glu	Ser	Ser	Ile	Asn	Tyr	Val
			100					105					110		
Ser	Ala	Ile	Lys	Arg	Leu	Ile	Asn	Phe	Met	Ile	Leu	Ile	Ile	Thr	Lys
		115				120						125			
Tyr	Trp	Ile	Thr	Tyr	Phe	Ile	Val	Asn	Leu	Ile	Phe	His	Asn	Asp	Lys
	130					135					140				
Leu	Leu	Tyr	Leu	Asn	Asn	Asp	Ser	Lys	His	Leu	Tyr	Lys	Cys	Leu	Leu
145				150					155					160	
Phe	Leu	Asn	Ile	Cys	Ile	Phe	Ile	Val	His	Ile	Leu	Lys	Ser	Ile	Phe
			165					170						175	
Ile	Ile	Lys	Ile	Met	Ala	Asp	Asp	Ser	Leu	Arg	Leu	Ile	Asn	Glu	Asn
			180					185					190		
Asp	Leu	Thr	Asp	Phe	Tyr	Ile	Thr	Leu	Asn	Lys	Asn	Asp	Glu	Tyr	Arg
		195				200						205			
Met	Val	Lys	Pro	Lys	Tyr	Arg	Lys	Ile	Asp	Asn	Phe	Ile	Ile	Ile	Lys
	210				215						220				
Lys	Ser	Glu	Asp	Phe	Thr	Asn	Ser	Asn	Glu	Tyr	Lys	Val	Ile	Asn	Lys
225				230					235					240	
Ser	Lys	Asn	Phe	Glu	Glu	Ile	Ile	Tyr	His	Phe	Asp	Asn	Leu	Thr	Ser
			245					250						255	

Asn His

<210> 6858
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6858

Asp	His	Arg	Asp	Arg	Cys	His	His	Asn	Ser	His	Thr	Lys	Gly	Val	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

6857-6858

1 5 10 15
 Asp Glu Leu Asp Asp His Gly Arg Tyr Ala Ile Val Ile Gln Arg Cys
 20 25 30
 Arg Asp His Gln His Lys Gly Trp Gln Gly Thr Thr Lys
 35 40 45

<210> 6859

<211> 58

<212> PRT

<213> S.epidermidis

<400> 6859

Ser Asn Ser Asp Asn Ser Arg Arg Tyr Ile Cys Tyr Cys Leu Leu Thr
 1 5 10 15
 Phe Asn Leu Leu Ile Phe Gly Asn His Ile Lys Ser Leu Asn Leu Gln
 20 25 30
 Lys Lys Leu Val Lys Ile Lys Ile Ile Arg Lys Phe Arg Leu Leu Glu
 35 40 45
 Thr Lys Cys Ile Ser Thr Ser Gln Tyr Asn
 50 55

<210> 6860

<211> 396

<212> PRT

<213> S.epidermidis

<400> 6860

Ser Arg Ser Asp Phe Met Ser Leu Ser Lys Glu Thr Glu Val Ile Phe
 1 5 10 15
 Asp Val Arg Arg Gly Asn Asp Tyr Asp Ser Ala Asn Pro Pro Leu Tyr
 20 25 30
 Asp Ser Ser Thr Phe His Gln Lys Val Leu Gly Gly Glu Thr Gln Tyr
 35 40 45
 Asp Tyr Ala Arg Ser Gly Asn Pro Asn Arg Thr Leu Leu Glu Glu Lys
 50 55 60
 Leu Ala Arg Leu Glu Gly Gly Lys Tyr Gly Phe Ala Tyr Ala Ser Gly
 65 70 75 80
 Ile Ala Ala Ile Ser Ala Val Leu Leu Thr Leu Asn Ala Gly Asp His
 85 90 95
 Val Ile Leu Pro Asp Asp Val Tyr Gly Gly Thr Phe Arg Leu Thr Glu
 100 105 110
 Gln Ile Leu Asn Arg Phe Asn Ile Glu Phe Thr Thr Val Asn Ala Thr
 115 120 125
 His Ile Asp His Ile Thr Glu Ala Ile Gln Ser Asn Thr Lys Leu Ile
 130 135 140
 Tyr Val Glu Thr Pro Ser Asn Pro Leu Phe Lys Ile Thr Asp Ile His
 145 150 155 160
 Ala Val Ala Thr Leu Ala Lys Glu His Lys Ile Leu Leu Ala Val Asp
 165 170 175
 Asn Thr Phe Met Thr Pro Leu Gly Gln Ser Pro Leu Ala Leu Gly Ala
 180 185 190
 Asp Ile Val Ile His Ser Ala Thr Lys Phe Leu Gly Gly His Ser Asp
 195 200 205
 Leu Ile Ala Gly Ala Ala Ile Thr Asn Asn Arg Glu Val Ala Asn Ala
 210 215 220
 Leu Tyr Leu Leu Gln Asn Gly Thr Gly Thr Ala Leu Ser Ala Tyr Asp

<210> 6862
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6862
 His Gly Phe Glu Ser Arg Arg Ser His His Ser Arg Ser Arg Ser Val
 1 5 10 15
 Ala Val Asn Thr Pro Ala Cys His Ala Gly Asp Arg Gly Phe Asp Ser
 20 25 30
 Arg Arg Asp Arg Ile Ala Tyr Pro Ile Gly
 35 40

<210> 6863
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6863
 Asn Ile Val Glu Gly Tyr Val Ser Lys Asn Leu Ala Phe Lys Phe Thr
 1 5 10 15
 Ala Phe Ser Ala Leu Phe Lys Tyr Ser Lys Thr Gln Lys Gln Pro Arg
 20 25 30
 Lys Pro Ile Leu Thr Gly Phe Tyr Asn Lys
 35 40

<210> 6864
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6864
 Leu Pro Leu Asp Ile Ser Thr Val Trp Leu Arg Ile Ser Val Ile Gly
 1 5 10 15
 Leu Val Ile Val Arg Ala Met Lys Asn Pro Ser Ile Thr Val Met Asn
 20 25 30
 Ser Asp Ile Ala Val Pro Thr Met Asn Ile
 35 40

<210> 6865
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6865
 Asn Met Leu Glu Asn Ile Ile Asp Tyr Tyr Lys Asp Tyr Phe Tyr Pro
 1 5 10 15
 Arg Glu Lys Ile Lys His Asn Asn Val Glu Cys Asn Val Ser Leu Phe
 20 25 30
 Phe Lys Ala Val Asp Ala Phe Lys Lys
 35 40

<210> 6866
 <211> 254
 <212> PRT

<213> S.epidermidis

<400> 6866

```

Tyr Glu Leu Glu Val Arg Gln Met Ser Gln Tyr Pro Leu Trp Asn Gln
1      5      10      15
Leu Asn Thr Leu Lys Glu Ala Gln Trp Val Asp Leu Thr His Thr Phe
      20      25      30
Asp Pro Asn Ile Pro Arg Phe Ser Glu Phe Glu Lys Gly Glu Val Ser
      35      40      45
Thr Leu Phe Asn Val Lys Asp His Gly Phe Tyr Val Gln Arg Trp Ser
      50      55      60
Ile Val Thr Gln Tyr Gly Thr His Ile Asp Ala Pro Ile His Phe Val
      65      70      75      80
Glu Asn Arg Arg Tyr Leu Glu Glu Leu Asp Leu Lys Glu Leu Val Leu
      85      90      95
Pro Leu Ile Val Leu Asp Tyr Ser Lys Glu Ala Ala Gln Asn Ser Asp
      100      105      110
Phe Ile Val Ser Arg Lys His Leu Glu Asp Trp Glu Gln Gln His Gly
      115      120      125
Arg Ile Glu Ala Gly Thr Phe Val Ala Leu Arg Thr Asp Trp Ser Lys
      130      135      140
Arg Trp Pro Asp Ile Glu Lys Phe Glu Asn Lys Asp Val Asp Gly His
      145      150      155      160
Gln His Leu Pro Gly Trp Gly Leu Asp Ala Leu Lys Phe Leu Ile Glu
      165      170      175
Glu Arg Gly Val Lys Ser Ile Gly His Glu Thr Phe Asp Thr Asp Ala
      180      185      190
Ser Ile Asp Thr Ala Lys Asn Gly Asp Ile Val Gly Glu Arg Tyr Ile
      195      200      205
Leu Gly Gln Asp Thr Phe Gln Val Glu Leu Leu Thr Asn Leu Asp Gln
      210      215      220
Leu Pro Thr Arg Gly Ala Ile Ile Tyr Ala Ile Ser Pro Lys Pro Lys
      225      230      235      240
Asp Ala Pro Gly Phe Pro Val Arg Ala Phe Ala Ile Lys Pro
      245      250

```

<210> 6867

<211> 289

<212> PRT

<213> S.epidermidis

<400> 6867

```

Ile Lys Ile Glu Arg Cys Gly Lys Glu Met Ala Tyr Thr Asp Asp Gln
1      5      10      15
Arg Leu Lys Met Asn Asn Asp Asp Ser Val Gln Phe Ile Glu Leu Glu
      20      25      30
Leu Ile Arg Pro Asn Pro Tyr Gln Pro Arg Lys Thr Phe Glu Glu Glu
      35      40      45
Arg Leu Asn Asp Leu Ala Ser Ser Ile Gln Gln His Gly Ile Leu Gln
      50      55      60
Pro Ile Val Leu Arg Gln Thr Val Gln Gly Tyr Tyr Ile Val Val Gly
      65      70      75      80
Glu Arg Arg Phe Arg Ala Ser Lys Leu Ala Gly Leu Thr Glu Val Pro
      85      90      95
Ala Ile Ile Lys Glu Leu Ser Asp Glu Asp Met Met Glu Leu Ala Ile
      100      105      110

```


Ile Glu Asn Leu Gln Arg Glu Asp Leu Asn Ala Ile Glu Glu Ala Glu
 115 120 125
 Ser Tyr Lys Lys Met Met Thr Asp Leu Asn Ile Thr Gln Gln Glu Val
 130 135 140
 Ala Arg Arg Leu Gly Lys Ser Arg Pro Tyr Ile Ala Asn Met Leu Arg
 145 150 155 160
 Leu Leu Gln Leu Pro Lys Asn Val Ala Gln Met Val Gln His Gly Ala
 165 170 175
 Leu Ser Ser Ala His Gly Arg Thr Leu Leu Thr Leu Lys Asp Ala Ser
 180 185 190
 Lys Ile Lys Lys Thr Ala Lys Gln Ala Ala Gln Glu Ser Trp Ser Val
 195 200 205
 Arg Tyr Leu Glu Glu Tyr Val Asn Gly Leu Val Ser Lys Asp Ile Ser
 210 215 220
 Arg Lys Val Asp Lys Glu Thr Lys Glu Ser Lys Pro Lys Met Ile Gln
 225 230 235 240
 Gln Gln Glu Arg Phe Leu Lys Lys Gln Tyr Gly Ala Lys Val Asp Ile
 245 250 255
 Ser Thr Ser Lys Asn Val Gly Lys Ile Thr Phe Glu Phe Lys Ser Glu
 260 265 270
 Ala Glu Phe Lys Arg Leu Ile Arg Gln Leu Asn Lys Asp Tyr Lys Glu
 275 280 285
 Tyr

<210> 6868
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 6868
 Asn Arg Ser Asp Lys Lys Pro Tyr Leu Ser Ser Val His Ile Ser Phe
 1 5 10 15
 Phe Arg Ser Leu Arg Ile Lys Ile Ser Ala Leu His Ala Lys Lys Pro
 20 25 30
 His Ser Ser Val Glu Lys Cys Gly Cys Gln Lys Ser Tyr Phe Leu Phe
 35 40 45
 Asp Ser Lys Ile Ile
 50

<210> 6869
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6869
 Tyr Lys Gln Glu Ile Lys Lys Cys Met Arg His Ser Tyr Val Ser Cys
 1 5 10 15
 Ile Leu Ala Tyr Trp Thr Ser Met Thr Glu Leu Glu His Asn Leu Ile
 20 25 30
 Thr Ser Leu Val Arg Leu Pro Tyr Ile Asn Phe Cys Ser
 35 40 45

<210> 6870
 <211> 186
 <212> PRT

<213> S.epidermidis

<400> 6870

```

His Ile Lys Glu Gly Ile Asn Met Ala Gly Arg Pro Lys Asp Pro Thr
1           5           10           15
Ile Asn Lys Lys Ile Tyr Thr Glu Ile Gln Arg Leu Leu Glu Thr Thr
           20           25           30
His Phe Arg Asp Ile Thr Ile Asp Gln Ile Ser Glu Asn Thr Gly Ile
           35           40           45
Ser Lys Ala Thr Ile Tyr Arg Arg Trp Lys Asp Lys Ser Ser Ile Ile
           50           55           60
Met Ser Ala Phe Ile Glu Gln Ser Gln Tyr Ile Val Ile His Asn Gln
65           70           75           80
Asp Asn Leu Tyr Asp Asp Leu Phe Gln Phe Leu Val Lys Ile Lys Asp
           85           90           95
Ile Tyr Lys Thr Lys Leu Gly Ser Ala Val Ile Glu Ile Leu Ile Ser
           100          105          110
His Gln Gln Met Glu Ala Arg Glu Thr Phe Met Thr Asn Tyr Phe Asn
           115          120          125
His Asn Arg Lys Val Leu Lys Glu Ile Val Arg Lys His Ile Gln Glu
           130          135          140
Glu Glu Gln Asp Leu Phe Ile Asp Leu Ile Phe Ser Pro Ile Tyr Phe
145          150          155          160
Asn Ile Leu Ile Lys Pro Glu Thr Leu Asp Lys Asn Tyr Ile Lys Lys
           165          170          175
Met Leu Asn Gln Val Leu Arg Ile Tyr His
           180          185

```

<210> 6871

<211> 61

<212> PRT

<213> S.epidermidis

<400> 6871

```

Tyr Leu Met Glu Val Phe Glu Ile Arg Ser Arg Glu Lys Ser Leu Ile
1           5           10           15
Leu Cys Ser Gln Met Thr Ser Val Glu Trp His Lys Lys Leu Ser Gly
           20           25           30
Lys Val Ile Ala Tyr Ala Ile Leu Ile Arg Ala Val Ser Lys Ser Phe
           35           40           45
Lys Ile Phe Leu Glu Val Glu Ser Leu Arg Lys Ile Lys
           50           55           60

```

<210> 6872

<211> 117

<212> PRT

<213> S.epidermidis

<400> 6872

```

Cys Leu Met Glu Lys Ala Tyr Arg Ile Lys Arg Asn Ser Asp Phe Gln
1           5           10           15
Ala Ile Tyr Lys Asn Gly Lys Ser Val Ala Asn Arg Gln Phe Val Val
           20           25           30
Tyr Thr Tyr Lys Asn Arg Asp Leu Lys His Phe Arg Leu Gly Ile Ser
           35           40           45
Val Ser Lys Lys Leu Gly Asn Ala Val Thr Arg Asn Arg Ile Lys Arg

```

50		55		60	
Ala	Ile	Arg	Glu	Asn	Phe
65		70		75	
Asp	Ile	Ile	Val	Ile	Ala
		85		90	
Glu	Ile	Gln	Ser	Ser	Leu
		100		105	
Asn	Lys	Lys	Ile	Lys	
		115			

<210> 6873
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6873	
Ile	Gln
1	5
Lys	Arg
	10
Lys	Arg
	15
Lys	Arg
	20
Lys	Arg
	25
Lys	Arg
	30
Lys	Arg
	35
Lys	Arg
	40
Lys	Arg
	45
Lys	Arg
	50

<210> 6874
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6874	
His	Leu
1	5
Ala	Ile
	10
Ala	Ile
	15
Ala	Ile
	20
Ala	Ile
	25
Ala	Ile
	30
Ala	Ile
	35
Ala	Ile
	40
Ala	Ile
	45

<210> 6875
 <211> 216
 <212> PRT
 <213> S.epidermidis

<400> 6875	
Tyr	Val
1	5
Asp	Ile
	10
Asp	Ile
	15
Asp	Ile
	20
Asp	Ile
	25
Asp	Ile
	30
Asp	Ile
	35
Asp	Ile
	40
Asp	Ile
	45
Asp	Ile
	50
Asp	Ile
	55
Asp	Ile
	60
Asp	Ile
	65
Asp	Ile
	70
Asp	Ile
	75
Asp	Ile
	80
Asp	Ile
	85
Asp	Ile
	90
Asp	Ile
	95

Val Val Phe Leu Ile Phe Leu Val Ile Ser Lys Ile Phe Lys Ser Asp
 100 105 110
 Ala Lys Ala Ser Ser Leu Phe Ser Ala Ala Leu Ser Tyr Ser Ile Ile
 115 120 125
 Ile Leu Gly Phe Thr Ile Ile Ile Ser Leu Ile Gln Ile Val Phe Gly
 130 135 140
 Leu Lys Ile Thr Asp Tyr Lys Leu Asp Ser Leu Asn Ile Phe Ser Lys
 145 150 155 160
 Asp Asn Lys Thr Leu Met Ala Phe Ser Leu Thr Asn Leu Leu Lys Ala
 165 170 175
 Phe Leu Thr Gly Val Val Tyr Tyr Ser Thr Ser Arg Leu Ser Lys Lys
 180 185 190
 Thr Ser Met Ile Leu Gly Ile Ile Ala Leu Ile Ile Leu Ile Gly Ser
 195 200 205
 Gly Met Leu Gly Gly Met Asn Gly
 210 215

<210> 6876

<211> 149

<212> PRT

<213> S.epidermidis

<400> 6876

Thr Met Lys Glu Ile Asn Ile Val Ser Leu Gln Met Ile Lys Thr Asp
 1 5 10 15
 Thr Leu Ser Tyr Leu Lys Asn His Ile Ser Asn Pro Glu Asp Ala Ala
 20 25 30
 Glu Ile Leu Arg Ser Phe Ile Gly Asn Ser Asp Arg Glu His Leu Ile
 35 40 45
 Leu Ile Cys Met Asn Ser Lys Asn Glu Pro Thr His Ile Gln Thr Leu
 50 55 60
 Ser Ile Gly Ser Ile Asn Gln Thr Val Ile His Pro Arg Glu Ile Phe
 65 70 75 80
 Lys Thr Ala Ile Leu Ser Asn Ala Asn Ser Ile Met Leu Gly His Asn
 85 90 95
 His Pro Ser Gly Asp Ile Thr Pro Ser Pro Glu Asp Ile Asn Val Thr
 100 105 110
 Lys Arg Leu Met Leu Ile Ser Glu Met Met Gly Ile Leu Phe Tyr Asp
 115 120 125
 His Ile Ile Phe Ser Asp Ser Asn Thr Tyr Ser Ile Arg Gln His Asp
 130 135 140
 Leu Glu Val Glu Val
 145

<210> 6877

<211> 61

<212> PRT

<213> S.epidermidis

<400> 6877

Cys Ser Ser Phe Ile Tyr Leu Ile Lys Asn Ile Asn Ile Glu Ile Glu
 1 5 10 15
 Arg Lys Val Thr Leu Gln Ala Val Asn Tyr Asn Asn Val Glu Ile Leu
 20 25 30
 Ser Pro Leu Ile Arg Glu Lys Leu Tyr Val Tyr Arg His Asn Val Ser
 35 40 45

Thr Ile Thr Gln Asn Lys Ile Phe Ser Phe Asn Lys Leu
 50 55 60

<210> 6878
 <211> 213
 <212> PRT
 <213> S.epidermidis

<400> 6878
 Lys Glu Leu Leu Asn Ser Met Lys Lys Arg Val Ile Thr Tyr Leu Ile
 1 5 10 15
 Leu Ala Leu Ser Leu Thr Leu Ala Ala Cys Ser Asn Thr Asn Asp Asn
 20 25 30
 Asn Asn Gln Glu His His Ser Asn Ala His Ala Pro Lys Asn Ala Lys
 35 40 45
 Thr Leu Lys Glu Lys Asp Ile Phe Ser Ser Asn Lys Lys Gly Gln Lys
 50 55 60
 Ile Ser Glu Lys Glu Met Lys Gln Ala Leu Glu Lys Tyr Leu Gln Ala
 65 70 75 80
 Asn Ser Asp Val Leu Asp Asn Lys Tyr Val Met Gln His Lys Leu Asp
 85 90 95
 Lys Gln Ser Asp Ser Asn Pro Lys Ile Thr Glu Ser Gln Ala Asp Arg
 100 105 110
 Leu Ser Lys Leu Ser Asn Leu Ala Val Lys Asn Asp Leu His Phe Lys
 115 120 125
 Lys Phe Ile Lys Asn Asn His Ile Pro Glu Glu Tyr Lys Asp Pro Thr
 130 135 140
 Asp Arg Ile Ile Asn Tyr Phe His Ala Leu Asn Ser Thr Ile Ser Asn
 145 150 155 160
 Val Asp Ala Asp Ile Glu Lys Leu Asn Tyr Gln Pro Gln Asn Ser Ile
 165 170 175
 Asn Val Val Asp Val Pro Thr Lys Tyr Ser Gly Asp Val Asn Lys Lys
 180 185 190
 Gln Gln Asp Lys Ile Thr Thr Phe Leu Lys Lys Lys Gly Ile Asp Thr
 195 200 205
 Glu Val Phe Asn Lys
 210

<210> 6879
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 6879
 Glu Tyr Val Leu Thr Ile Leu Lys Glu Asp Val Arg Ser Thr Ile Ile
 1 5 10 15
 Thr Gln Leu Val Leu Asn Asn Ser Cys Phe Ile Leu Ser Pro Phe Phe
 20 25 30
 Tyr Phe Val Thr Ser Ser Phe Glu Thr Ala Leu Pro Ser Thr Ser Ser
 35 40 45
 Ser Pro
 50

<210> 6880
 <211> 128
 <212> PRT

<213> S.epidermidis

<400> 6880

```

Thr Thr Ser Leu Leu His Tyr Leu Gly Gly Asn Asn Met Lys Thr Ile
1          5          10          15
Thr Gln Glu Leu Lys Gln Tyr Ile Thr His Leu Phe Gln Leu Ser Asn
20          25          30
Asn Glu Ala Trp Glu Cys Glu Ala Leu Glu Glu Ala Ala Glu Asn Ile
35          40          45
Leu Pro Glu Arg Phe Ile Asn Asp Ser Pro Leu Val His Leu Thr Leu
50          55          60
Glu Thr Tyr Thr Tyr Tyr Asn Asp Glu Leu His Glu Leu Ser Ile Tyr
65          70          75          80
Pro Phe Leu Met Tyr Ala Asn Asn Gln Leu Ile Ser Val Gly Tyr Leu
85          90          95
Asp His Phe Asp Met Asp Phe Leu Tyr Leu Thr Asp Thr Gln Asn Ile
100          105          110
Ile Ile Asp Glu Arg His Leu Leu Lys Gln Gly Gly Gln Asp His Glu
115          120          125

```

<210> 6881

<211> 70

<212> PRT

<213> S.epidermidis

<400> 6881

```

Lys Arg Ala Leu Glu Thr Asp Asn Leu Tyr Tyr Leu Ala Tyr Val Thr
1          5          10          15
Thr Leu Asp Asn Cys Phe Lys Tyr Tyr Gln Leu Ile Thr Gln Asn Glu
20          25          30
His Phe Cys Tyr Ser Gln Gln Glu Arg Glu Ser Tyr Gln Gln Lys
35          40          45
Phe Gln Ser Met Ile Asn Gly Leu Lys Ile Lys Ile Gly Ile Gln Ser
50          55          60
Ser Asn Asp Asp Ala Gln
65          70

```

<210> 6882

<211> 52

<212> PRT

<213> S.epidermidis

<400> 6882

```

Arg Phe Lys Leu Leu Leu Met Tyr Trp Ile Val Thr His Ser Arg Val
1          5          10          15
Val Tyr Gly Asp Thr Val Glu Thr Ser Lys Ala Ile Phe Ser Arg Leu
20          25          30
Tyr Glu Ser Tyr Lys Leu Phe Tyr Asp Asn Ser Lys Phe Leu Leu Tyr
35          40          45
Phe Gln Tyr Asn
50

```

<210> 6883

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6883

Ser Ile Lys Leu Asn Asn Arg Arg Ile Glu Asp Arg Thr Asn Asn Gly
 1 5 10 15
 Val Lys Asn Met Asp Glu Leu Ile Glu Ile Leu Ala Asp Leu Val Ile
 20 25 30
 Glu Glu Ile Asn Gln Thr Asn Asp
 35 40

<210> 6884

<211> 372

<212> PRT

<213> S.epidermidis

<400> 6884

Thr Met Lys Leu Asn Thr Leu Gln Leu Glu Asn Tyr Arg Asn Tyr Glu
 1 5 10 15
 Gln Val Thr Leu Asp Cys His Pro Glu Val Asn Ile Leu Ile Gly Glu
 20 25 30
 Asn Ala Gln Gly Lys Thr Asn Leu Leu Glu Ser Ile Tyr Thr Leu Ala
 35 40 45
 Leu Ala Lys Ser His Arg Thr Ser Asn Asp Lys Glu Leu Ile Arg Phe
 50 55 60
 Lys Ser Asp Tyr Ala Lys Ile Glu Gly Glu Leu Ser Tyr Arg His Gly
 65 70 75 80
 Thr Met Pro Leu Thr Met Phe Ile Thr Lys Lys Gly Lys Gln Val Lys
 85 90 95
 Val Asn His Leu Glu Gln Ser Arg Leu Thr Gln Tyr Ile Gly His Leu
 100 105 110
 Asn Val Val Leu Phe Ala Pro Glu Asp Leu Asn Ile Val Lys Gly Ser
 115 120 125
 Pro Gln Ile Arg Arg Arg Phe Ile Asp Met Glu Leu Gly Gln Ile Ser
 130 135 140
 Ala Val Tyr Leu Asn Asp Leu Ala Gln Tyr Gln Arg Ile Leu Lys Gln
 145 150 155 160
 Lys Asn Asn Tyr Leu Lys Gln Leu Gln Ile Gly Gln Lys Thr Asp Thr
 165 170 175
 Thr Met Leu Glu Val Leu Asn Gln Gln Phe Ala Glu Tyr Ala Leu Lys
 180 185 190
 Val Thr Leu Arg Arg Glu His Phe Ile Lys Glu Leu Glu Thr Leu Ala
 195 200 205
 Gln Pro Ile His Ala Gly Ile Thr Asn Asp Arg Glu Thr Leu Thr Leu
 210 215 220
 Asp Tyr Val Pro Ser Leu Lys Leu Ser Asn Tyr Glu Ala Asn Gln Ser
 225 230 235 240
 Glu Leu Ile Glu Glu Val Leu Ala Leu Leu Asn Asp Asn Leu Gln Arg
 245 250 255
 Glu Lys Glu Arg Gly Val Cys Leu Tyr Gly Pro His Arg Asp Asp Leu
 260 265 270
 Ser Phe Asn Val Asn Gly Met Asp Ala Gln Thr Tyr Gly Ser Gln Gly
 275 280 285
 Gln Gln Arg Thr Thr Ala Leu Ser Ile Lys Leu Ala Glu Ile Glu Leu
 290 295 300
 Met Asn Ile Glu Val Gly Glu Tyr Pro Ile Leu Leu Leu Asp Asp Val
 305 310 315 320
 Leu Ser Glu Leu Asp Asp Ser Arg Gln Thr His Leu Leu Ser Thr Ile

3084

				325					330					335			
Gln	His	Lys	Val	Gln	Thr	Phe	Val	Thr	Thr	Thr	Ser	Val	Glu	Gly	Ile		
			340					345					350				
Asp	His	Glu	Ile	Met	Asn	Asn	Ala	Lys	Leu	Tyr	Arg	Ile	Ser	Gln	Gly		
		355					360					365					
Glu	Ile	Leu	Lys														
	370																

<210> 6885
 <211> 129
 <212> PRT
 <213> S.epidermidis

<400> 6885

Ile	Gln	Leu	Cys	Asn	Arg	Thr	Val	Leu	Trp	Asn	Arg	Asp	Val	Gly	Asn		
1			5					10						15			
Ile	Tyr	Thr	Gly	Ser	Leu	Tyr	Leu	Ser	Leu	Ile	Ser	Leu	Leu	Gln	Asn		
			20					25					30				
His	Thr	Phe	Gln	Pro	Glu	Glu	Lys	Val	Cys	Leu	Phe	Ser	Tyr	Gly	Ser		
		35					40					45					
Gly	Ala	Val	Gly	Glu	Ile	Phe	Ser	Gly	Ser	Ile	Val	Lys	Gly	Tyr	Asp		
	50					55					60						
Lys	Ala	Leu	Asp	Lys	Glu	Lys	His	Leu	Asn	Met	Leu	Glu	Ser	Arg	Glu		
65					70				75						80		
Gln	Leu	Ser	Val	Glu	Glu	Tyr	Glu	Thr	Phe	Phe	Asn	Arg	Phe	Asp	Asn		
			85					90						95			
Gln	Glu	Phe	Asp	Phe	Glu	Arg	Glu	Leu	Thr	Gln	Asp	Pro	Tyr	Ser	Lys		
		100						105					110				
Val	Tyr	Leu	Tyr	Ser	Ile	Glu	Asp	His	Ile	Arg	Thr	Tyr	Lys	Ile	Glu		
		115					120					125					

Lys

<210> 6886
 <211> 144
 <212> PRT
 <213> S.epidermidis

<400> 6886

Arg	Gly	Glu	Leu	Met	His	Trp	Lys	Glu	Asn	Arg	Ile	Lys	Ser	Ala	Lys		
1				5				10						15			
Asn	Asp	Thr	Asn	Pro	Met	Val	Ile	Lys	Glu	Leu	Lys	Gly	Ser	Tyr	Val		
		20						25					30				
Val	Phe	Gly	Asp	Val	Gln	Phe	Leu	Pro	Gly	Tyr	Cys	Val	Leu	Leu	Pro		
	35					40						45					
Lys	Arg	Glu	Val	Arg	Leu	Leu	Asn	Asp	Leu	Thr	Leu	Glu	Glu	Arg	Gln		
	50					55					60						
Asp	Tyr	Leu	Leu	Asp	Met	Ser	Phe	Val	Gly	Asp	Ala	Met	Met	Lys	Ala		
65					70				75						80		
Leu	Lys	Pro	Thr	Arg	Val	Asn	Tyr	Glu	Ile	Leu	Gly	Asn	Lys	Asn	His		
			85					90						95			
Phe	Leu	His	Ala	His	Leu	Phe	Gln	Arg	Tyr	Glu	Trp	Glu	Asp	Glu	Ser		
		100						105					110				
Val	Arg	Tyr	Met	Pro	Val	Trp	Cys	Met	Met	Leu	Leu	Ile	Gly	Leu	Met		
		115					120					125					

Lys Lys Arg Leu Thr Ile Leu Ile Asn Met Met Lys Leu Glu Ile Arg

6885-6886

130

135

140

<210> 6887

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6887

Leu Asp Cys Cys Ala Leu Arg Asp Ala Phe Ile Ala Leu Glu Arg Leu
 1 5 10 15
 Ile Leu Val Leu Glu Glu Val Glu Pro Leu Asp Ala Glu Ala Ala Leu
 20 25 30
 Leu Leu Glu Leu Glu Leu Ala Lys Leu Glu Leu Leu Val Pro Pro Asp
 35 40 45
 Val Val Ala
 50

<210> 6888

<211> 758

<212> PRT

<213> S.epidermidis

<400> 6888

Ile Asn His Cys Gln Gln Gly Gly Asn Ile Met Thr Thr Ile Lys Thr
 1 5 10 15
 Ser Asn Leu Gly Phe Pro Arg Leu Gly Arg Lys Arg Glu Trp Lys Lys
 20 25 30
 Ala Ile Glu Asn Tyr Trp Ala His Lys Ile Asp Lys Ala Glu Leu Asp
 35 40 45
 Gln Thr Leu Thr Asp Leu His Lys Glu Asn Leu Leu Leu Gln Lys Asn
 50 55 60
 Tyr His Leu Asp Ser Ile Pro Val Gly Asp Phe Ser Leu Tyr Asp His
 65 70 75 80
 Ile Leu Glu Thr Ser Leu Leu Phe Asn Ile Ile Pro Glu Arg Phe Gln
 85 90 95
 Gly Arg Glu Val Asn Asp Asp Leu Leu Phe Asp Ile Ala Arg Gly Asn
 100 105 110
 Lys Glu His Val Ala Ser Ala Leu Ile Lys Trp Phe Asn Thr Asn Tyr
 115 120 125
 His Tyr Ile Val Pro Glu Trp Asp Asn Val Glu Pro Lys Val Glu Lys
 130 135 140
 Asn Thr Leu Leu Glu Arg Phe Lys Tyr Ala Gln Ser Ile Asn Val Asn
 145 150 155 160
 Ala His Pro Val Ile Val Gly Pro Ile Thr Phe Val Lys Leu Ser Lys
 165 170 175
 Gly Gly His Gln Ser Phe Glu Glu Lys Val Glu Thr Leu Leu Pro Leu
 180 185 190
 Tyr Lys Glu Val Leu Gln Ser Leu Val Asp Ala Gly Ala Lys Tyr Ile
 195 200 205
 Gln Ile Asp Glu Pro Ile Leu Val Thr Asp Asp Ser Glu Ser Tyr Glu
 210 215 220
 Asp Ile Thr Arg Lys Ala Tyr Asp Tyr Phe Ala Asn Glu Gly Leu Gly
 225 230 235 240
 Lys Tyr Leu Val Ile Gln Thr Tyr Phe Glu Arg Val His Leu Lys Phe
 245 250 255
 Leu Ser Ser Leu Pro Val Gly Gly Leu Gly Leu Asp Leu Val His Asp

705 710 715 720
 Val Asn Pro Asp Cys Gly Leu Lys Thr Arg Lys Glu Asp Glu Val Lys
 725 730 735
 Asp Ala Leu Thr Val Leu Val Asn Ala Val Lys Lys Lys Arg Gln Glu
 740 745 750
 Ser Glu Ser Thr Thr Ala
 755

<210> 6889
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6889
 Asn Glu Arg Leu Arg Arg Leu Thr Met Ser Lys Ile Met Asn Leu Ile
 1 5 10 15
 Thr Tyr Asp Lys Leu Leu Lys Asn Ile Thr Ala Ile His Ile Asn Leu
 20 25 30
 Ile Cys Ser Asp Thr Phe Lys Ile Pro Leu
 35 40

<210> 6890
 <211> 127
 <212> PRT
 <213> S.epidermidis

<400> 6890
 Ser Ser Leu Cys Leu Asn Cys Ala Ala Ile Leu Phe Trp Leu Ile Leu
 1 5 10 15
 Lys Ser Ser Gly Glu Val Ile Ser Lys Val Val Leu Val Leu Asp Cys
 20 25 30
 Val Ile Ala Ala Lys Gln Arg Ile Leu Thr Val Lys Ala Glu Met Ile
 35 40 45
 Ala Ile Thr Val Arg Asp Ile Ala Phe Phe Phe Ile Leu Cys Met Ile
 50 55 60
 Asp Asp Val Lys Thr Thr Ser Val Ile Phe Thr Arg Pro Cys Leu Ile
 65 70 75 80
 Cys Phe Ser Val Leu Lys Ile Ser Asp Thr Glu Leu Leu Lys Asn Lys
 85 90 95
 Lys Ala Pro Thr Ile Val Lys Lys Ser Met Leu Lys Gly Val Ile Lys
 100 105 110
 Ala Val Val Lys Ala Leu Lys Thr Pro Asn Ile Ser Val Asp Ile
 115 120 125

<210> 6891
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 6891
 Asn Ile Leu Cys Leu Ile Phe Phe Asn Met Tyr Leu Phe Ile Phe Tyr
 1 5 10 15
 Arg Asn Leu Leu Tyr Leu Val Ala Glu Arg Ile Phe Ser Lys Leu Glu
 20 25 30
 Leu Cys Phe Thr Ile Ser Ile Gln Tyr Lys Glu Tyr Phe Ala Ile Ile
 35 40 45

Tyr Leu Lys
50

<210> 6892

<211> 243

<212> PRT

<213> S.epidermidis

<400> 6892

Thr	Gly	Leu	Trp	Arg	Gly	Leu	Ala	Pro	Cys	Phe	Lys	Asp	Arg	Ser	Gly
1				5					10					15	
Ile	Met	Ser	Phe	Ser	Phe	Leu	Phe	Ile	Leu	Thr	Ala	Gly	Met	Val	Ala
			20					25					30		
Ala	Phe	Asn	Pro	Cys	Gly	Ile	Ala	Leu	Leu	Pro	Ser	Tyr	Ile	Ser	Tyr
		35					40					45			
Leu	Ile	Gly	Gly	Glu	Thr	Lys	Asp	His	Ser	Phe	Arg	Tyr	Ala	Ile	Phe
	50					55					60				
Lys	Gly	Leu	Gly	Leu	Gly	Gly	Ala	Met	Thr	Thr	Gly	Phe	Leu	Thr	Ile
65				70						75					80
Phe	Val	Leu	Ala	Gly	Leu	Leu	Ile	Gly	Gly	Leu	Gly	Ser	Ala	Leu	Thr
				85				90						95	
Gly	Ile	Phe	Pro	Ile	Leu	Ser	Leu	Val	Met	Gly	Ile	Leu	Ile	Ala	Leu
			100					105					110		
Leu	Gly	Leu	Gly	Met	Leu	Phe	Gly	Lys	His	Leu	Pro	Ile	Lys	Ile	Gly
	115						120					125			
Ser	Phe	Gln	Val	Lys	Pro	Gly	Lys	Trp	Ser	Ile	Tyr	Phe	Tyr	Gly	Ile
	130					135					140				
Ala	Tyr	Ala	Val	Thr	Ser	Leu	Gly	Cys	Thr	Leu	Pro	Ala	Phe	Met	Leu
145					150					155					160
Val	Val	Ser	Ala	Ser	Leu	Asn	Asp	Asn	Ser	Val	Thr	Ala	Val	Ile	Ile
				165					170					175	
Lys	Phe	Ile	Ile	Tyr	Ser	Leu	Gly	Met	Gly	Ile	Val	Val	Thr	Ala	Ile
		180						185					190		
Thr	Met	Val	Ser	Leu	Ile	Ser	Arg	Gln	Leu	Val	Gln	Lys	Phe	Leu	His
	195						200					205			
Asn	Tyr	Met	Gly	Ser	Ile	Gln	Lys	Ile	Ala	Ala	Val	Val	Ile	Phe	Leu
	210					215					220				
Ser	Gly	Leu	Tyr	Met	Ala	Tyr	Tyr	Trp	Tyr	Phe	Gly	Ser	Gly	Gly	Ile
225					230					235					240
Cys	Thr	Phe													

<210> 6893

<211> 707

<212> PRT

<213> S.epidermidis

<400> 6893

Gly	Gly	Ile	Cys	Tyr	Ile	Ile	Ser	Ser	Phe	Thr	Ile	Thr	Phe	Ser	Leu
1				5					10					15	
Gly	Gly	Val	Asn	Leu	Asn	Asn	Asn	Ser	Glu	Glu	His	Asn	His	Gln	Asn
			20					25					30		
His	Met	Asn	His	Ser	Asn	His	Met	His	His	Asp	Asn	His	Glu	Ser	His
	35					40					45				
Asn	His	His	Ser	Gly	His	Ala	His	His	His	Gly	Asn	Phe	Lys	Val	Lys
	50					55					60				

Phe	Phe	Val	Ser	Leu	Ile	Phe	Gly	Ile	Pro	Ile	Ile	Leu	Leu	Ser	Pro
65					70					75					80
Leu	Met	Gly	Val	Asn	Leu	Pro	Phe	Gln	Phe	Thr	Phe	Pro	Gly	Ser	Glu
				85					90					95	
Trp	Val	Val	Leu	Ile	Leu	Ser	Thr	Ile	Leu	Phe	Phe	Tyr	Gly	Gly	Lys
			100					105					110		
Pro	Phe	Leu	Ser	Gly	Gly	Lys	Asp	Glu	Ile	Ala	Glu	Lys	Lys	Pro	Gly
		115					120					125			
Met	Met	Thr	Leu	Val	Ala	Leu	Gly	Ile	Ser	Val	Ala	Tyr	Ile	Tyr	Ser
	130						135				140				
Leu	Tyr	Ala	Phe	Tyr	Met	Asn	Asn	Phe	Ser	Asn	Ala	Thr	Gly	His	Thr
145					150					155					160
Met	Asp	Phe	Phe	Trp	Glu	Leu	Ala	Thr	Leu	Ile	Leu	Ile	Met	Leu	Leu
				165					170					175	
Gly	His	Trp	Ile	Glu	Met	Asn	Ala	Val	Gly	Asn	Ala	Gly	Asp	Ala	Leu
			180					185					190		
Lys	Lys	Met	Ala	Glu	Leu	Leu	Pro	Asn	Ser	Ala	Ile	Lys	Val	Met	Asp
		195					200					205			
Asn	Gly	Gln	Arg	Glu	Glu	Val	Lys	Ile	Ser	Asp	Ile	Met	Thr	Asp	Asp
	210						215				220				
Ile	Val	Glu	Val	Lys	Ala	Gly	Glu	Ser	Ile	Pro	Thr	Asp	Gly	Ile	Ile
225					230					235					240
Val	Gln	Gly	Gln	Thr	Ser	Ile	Asp	Glu	Ser	Leu	Val	Thr	Gly	Glu	Ser
				245					250					255	
Lys	Lys	Val	Gln	Lys	Asn	Gln	Asn	Asp	Asn	Val	Ile	Gly	Gly	Ser	Ile
			260					265					270		
Asn	Gly	Ser	Gly	Thr	Ile	Gln	Val	Lys	Val	Thr	Ala	Val	Gly	Glu	Asp
		275					280					285			
Gly	Tyr	Leu	Ser	Gln	Val	Met	Gly	Leu	Val	Asn	Gln	Ala	Gln	Asn	Asp
	290					295					300				
Lys	Ser	Ser	Ala	Glu	Leu	Ser	Asp	Lys	Val	Ala	Gly	Tyr	Leu	Phe	
305					310				315					320	
Tyr	Phe	Ala	Val	Ile	Val	Gly	Val	Ile	Ser	Phe	Ile	Val	Trp	Met	Leu
				325					330					335	
Ile	Gln	Asn	Asp	Val	Asp	Phe	Ala	Leu	Glu	Arg	Leu	Val	Thr	Val	Leu
			340					345					350		
Val	Ile	Ala	Cys	Pro	His	Ala	Leu	Gly	Leu	Ala	Ile	Pro	Leu	Val	Thr
		355					360					365			
Ala	Arg	Ser	Thr	Ser	Ile	Gly	Ala	His	Asn	Gly	Leu	Ile	Ile	Lys	Asn
	370					375					380				
Arg	Glu	Ser	Val	Glu	Ile	Ala	Gln	His	Ile	Asp	Tyr	Val	Met	Met	Asp
385					390					395					400
Lys	Thr	Gly	Thr	Leu	Thr	Glu	Gly	Asn	Phe	Ser	Val	Asn	His	Tyr	Glu
				405					410					415	
Ser	Phe	Lys	Asn	Asp	Leu	Ser	Asn	Asp	Thr	Ile	Leu	Ser	Leu	Phe	Ala
			420					425					430		
Ser	Leu	Glu	Ser	Gln	Ser	Asn	His	Pro	Leu	Ala	Ile	Ser	Ile	Val	Asp
		435					440					445			
Phe	Ala	Lys	Ser	Lys	Asn	Ile	Ser	Phe	Thr	Asn	Pro	Gln	Asp	Val	Asn
		450				455					460				
Asn	Ile	Pro	Gly	Val	Gly	Leu	Glu	Gly	Leu	Val	Asp	Asn	Lys	Thr	Tyr
465					470					475					480
Lys	Ile	Thr	Asn	Val	Ser	Tyr	Leu	Asp	Lys	His	Lys	Leu	Asn	Tyr	Asp
				485					490					495	
Asp	Asp	Leu	Phe	Thr	Lys	Leu	Ala	Gln	Gln	Gly	Asn	Ser	Ile	Ser	Tyr
			500					505					510		

3090

```

Leu Ile Glu Asp Gln Gln Val Ile Gly Met Ile Ala Gln Gly Asp Gln
    515                      520          525
Ile Lys Glu Ser Ser Lys Gln Met Val Ala Asp Leu Leu Ser Arg Asn
    530                      535          540
Ile Thr Pro Val Met Leu Thr Gly Asp Asn Asn Glu Val Ala His Ala
545                      550          555          560
Val Ala Lys Glu Leu Gly Ile Ser Asp Val His Ala Gln Leu Met Pro
    565                      570          575
Glu Asp Lys Glu Ser Ile Ile Lys Asp Tyr Gln Ser Asp Gly Asn Lys
    580                      585          590
Val Met Met Val Gly Asp Gly Ile Asn Asp Ala Pro Ser Leu Ile Arg
    595                      600          605
Ala Asp Ile Gly Ile Ala Ile Gly Ala Gly Thr Asp Val Ala Val Asp
    610                      615          620
Ser Gly Asp Ile Ile Leu Val Lys Ser Asn Pro Ser Asp Ile Ile His
625                      630          635          640
Phe Leu Thr Leu Ser Asn Asn Thr Met Arg Lys Met Val Gln Asn Leu
    645                      650          655
Trp Trp Gly Ala Gly Tyr Asn Ile Val Ala Val Pro Leu Ala Ala Gly
    660                      665          670
Ala Leu Ala Phe Ile Gly Leu Ile Leu Ser Pro Ala Val Gly Ala Ile
    675                      680          685
Leu Met Ser Leu Ser Thr Val Ile Val Ala Ile Asn Ala Phe Thr Leu
    690                      695          700
Lys Leu Lys
705

```

<210> 6894
 <211> 47
 <212> PRT
 <213> S.epidermidis

```

<400> 6894
Ile Thr Val Cys Ile Ala His Val Leu Ser Thr Ile Phe Ala Arg Asn
1          5          10          15
Tyr Val Tyr Lys Trp Ile Thr Ser Asn Lys Arg His Asn Ser Phe Phe
    20          25          30
Phe Thr Leu Gly Asn Asn Leu Tyr Gly Leu His Glu Leu Cys Ile
    35          40          45

```

<210> 6895
 <211> 43
 <212> PRT
 <213> S.epidermidis

```

<400> 6895
Phe Asn Leu Arg Arg Lys Asn Tyr Ser Asp Thr Leu Val Asp Asp Lys
1          5          10          15
Thr Trp Ile Asp Leu Asp Met Asp Thr Leu Leu His Lys Ile Asn Phe
    20          25          30
Asn Tyr Thr Val Ile Gly Glu Met Asn Ser Leu
    35          40

```

<210> 6896
 <211> 169
 <212> PRT

6894-6896
 S.epidermidis

<213> S.epidermidis

<400> 6896

```

Met Leu Asn Arg Val Val Leu Val Gly Arg Leu Thr Lys Asp Pro Glu
1          5          10          15
Tyr Arg Thr Thr Pro Ser Gly Val Ser Val Ala Thr Phe Thr Leu Ala
          20          25          30
Val Asn Arg Thr Phe Thr Asn Ala Gln Gly Glu Arg Glu Ala Asp Phe
          35          40          45
Ile Asn Cys Val Val Phe Arg Arg Gln Ala Glu Asn Val Asn Asn Tyr
          50          55          60
Leu Ser Lys Gly Ser Leu Ala Gly Val Asp Gly Arg Ile Gln Ser Arg
65          70          75          80
Ser Tyr Glu Asn Gln Glu Gly Arg Arg Ile Phe Val Thr Glu Val Val
          85          90          95
Cys Asp Ser Val Gln Phe Leu Glu Pro Lys Asn Ala Gln His Gly Gly
          100          105          110
Gln Arg Ser Gln Asn Asn Asn Phe Gln Asp Tyr Gly Gln Gly Phe Gly
          115          120          125
Gly Gln Gln Ser Gly Gln Asn Thr Ser Tyr Asn Asn Asn Asn Ser Ser
          130          135          140
Asn Ser Asn Gln Ser Asp Asn Pro Phe Ala Asn Ala Asn Gly Pro Ile
145          150          155          160
Asp Ile Ser Asp Asp Asp Leu Pro Phe
          165

```

<210> 6897

<211> 50

<212> PRT

<213> S.epidermidis

<400> 6897

```

Leu Tyr Gly Arg Leu Asn Val Ile Phe Thr Ile Ile Pro Tyr Ile Ser
1          5          10          15
Asp Leu Leu Asp Ser Leu Thr Thr Asn Ile Ile Ile Asp Ile Leu Val
          20          25          30
Phe His Thr His Leu Phe Asn Pro Lys Leu Ile Ser Ser Leu Cys Leu
          35          40          45
Cys Lys
          50

```

<210> 6898

<211> 40

<212> PRT

<213> S.epidermidis

<400> 6898

```

Ile Cys Met Leu Ile Leu Ile Phe Lys Leu Phe Lys Tyr Ile Pro Tyr
1          5          10          15
His Val Leu Asp Ser Ile Phe Tyr Ile Ile Phe Val Ile Leu Cys Ile
          20          25          30
Asn Leu Phe Ile Tyr Lys Ala Leu
          35          40

```

<210> 6899

<211> 60

<212> PRT

<213> S.epidermidis

<400> 6899

```

Asn Ile Ile Arg Leu Ser Asn Ile Thr Ala Leu Ser Leu Ser Asp Ala
1           5           10           15
Ile Gln Val Phe Phe Ala Met Val Lys Met Leu Leu Gly Thr Phe Asn
          20           25           30
Met Ile Ile Asn Val Asp Ile Cys Tyr Leu Asp Ile Leu Leu His Arg
          35           40           45
Ile Phe Tyr Arg Tyr Thr Ile Lys Asp Asn Ala Leu
          50           55           60

```

<210> 6900

<211> 117

<212> PRT

<213> S.epidermidis

<400> 6900

```

Met Lys Lys Arg Ile Ser Phe Thr Ala Ile Met Thr Val Leu Leu Ile
1           5           10           15
Gly Leu Thr Ala Cys Gly Ala Glu Ser Asp Thr Ala Asn Glu Ser Lys
          20           25           30
Val Gln Asp Ile Gln Gly Asn Pro Val Ser Leu Pro Asn Glu Lys Pro
          35           40           45
Thr Leu Ile Tyr Phe Met Ala Thr Trp Cys Pro Ser Cys Ile Tyr Asn
          50           55           60
Glu Glu Ile Phe Lys Glu Ile His Gln Leu Asn Pro Asn Asp Val Gln
          65           70           75           80
Leu Ile Thr Val Ser Leu Asp Pro Asn Thr Asp Thr Lys Glu Ser Phe
          85           90           95
Ala Lys Phe Lys Gln Asp Tyr Gly Gly Asp Trp Pro His Val Leu Lys
          100          105          110
Ile Gly Val Glu Leu
          115

```

<210> 6901

<211> 69

<212> PRT

<213> S.epidermidis

<400> 6901

```

Tyr Asn Leu Arg Asn Arg Leu Lys Glu Leu Arg Ala Arg Asp Gly Tyr
1           5           10           15
Asn Gln Thr Glu Leu Ala Lys Lys Ala Gly Ile Ser Arg Gln Thr Val
          20           25           30
Ser Leu Ile Glu Arg Asn Asp Phe Thr Pro Ser Ile Leu Thr Ala Ile
          35           40           45
Lys Ile Ala Arg Ile Phe Gly Glu Pro Val Glu Asp Ile Phe Ile Met
          50           55           60
Glu Glu Glu Asp Phe
          65

```

<210> 6902

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6902

```

Met Tyr Ile Phe Tyr Leu Lys Gln Val Phe Leu Val His Phe Gln Asn
1           5           10           15
His Leu Lys Ile Ser Leu His Asn Met Gln Ile Pro Phe Ile Ser Leu
          20           25           30
Pro Val Ile Phe Pro Ile Tyr Ser Phe His Asp Tyr Lys
          35           40           45

```

<210> 6903

<211> 78

<212> PRT

<213> S.epidermidis

<400> 6903

```

Arg Lys Lys Leu Ile Ile Ile Gly Gly His Phe Met Thr Ser Lys Tyr
1           5           10           15
Gly Ile Asn Asp Ile Val Glu Met Lys Lys Pro His Ala Cys Gly Thr
          20           25           30
Asn Arg Phe Lys Ile Ile Arg Met Gly Ala Asp Ile Arg Ile Lys Cys
          35           40           45
Glu His Cys Gln Arg Ser Val Met Ile Pro Arg Gln Val Phe Asn Lys
          50           55           60
Lys Met Lys Lys Val Leu Glu Ser His Gln Asp Lys Glu Ser
          65           70           75

```

<210> 6904

<211> 80

<212> PRT

<213> S.epidermidis

<400> 6904

```

Ser Leu Leu Arg Lys Lys Val Met His Leu Met Met Ile Asp His Asn
1           5           10           15
Gly Ile Phe Leu Cys Lys Phe Gly Asn Ile Met Trp Asn Val Phe Thr
          20           25           30
Ala Ile Lys Val Cys Asn Thr His Leu Asn Thr Met Lys Val Arg Asp
          35           40           45
Lys Leu Leu Asn Asn Arg Phe Glu Tyr Pro Asn Ile Met Thr Ile Arg
          50           55           60
Lys Glu Gly Leu Leu Leu Pro Ser Phe Leu Glu Lys Tyr Lys Leu Tyr
          65           70           75           80

```

<210> 6905

<211> 662

<212> PRT

<213> S.epidermidis

<400> 6905

```

Lys Val Ile Arg Gly Gly Arg Met Asn Arg Gln Ser Thr Lys Lys Ala
1           5           10           15
Leu Leu Ile Pro Phe Ile Leu Met Val Leu Thr Ala Ile Ala Leu Val
          20           25           30
Val Val Trp Phe Ile Phe Asn Gln Leu Val Ala Gly Ile Ala Thr Ala
          35           40           45

```

Ile	Leu	Ile	Val	Met	Ile	Ile	Ile	Ser	Gly	Val	Leu	Leu	Arg	Lys	Ala
50						55					60				
Phe	Leu	Lys	Met	Asp	Asn	Tyr	Val	Asp	Asp	Leu	Ser	Gly	His	Ile	Ser
65					70					75					80
Ala	Ser	Ser	Asn	Lys	Ala	Ile	Lys	His	Leu	Pro	Ile	Gly	Met	Ile	Val
				85					90					95	
Leu	Asp	Glu	Asp	Asn	His	Ile	Glu	Trp	Met	Asn	Gln	Phe	Met	Thr	Asp
			100					105					110		
His	Ile	Glu	Thr	Asn	Val	Ile	Ser	Glu	Asn	Val	Asn	Glu	Val	Phe	Pro
		115					120					125			
Asn	Ile	Leu	Lys	Gln	Leu	Glu	Lys	Val	Gln	Glu	Val	Glu	Ile	Glu	Asn
	130					135					140				
Asn	Asn	Tyr	Tyr	Tyr	His	Val	Arg	Tyr	Ser	Glu	Asn	Glu	His	Cys	Leu
145					150					155					160
Tyr	Phe	Phe	Asp	Met	Thr	Glu	Thr	Glu	Arg	Thr	Asn	Glu	Leu	Tyr	Glu
				165					170					175	
Asp	Ser	Lys	Pro	Ile	Ile	Ala	Thr	Ile	Phe	Leu	Asp	Asn	Tyr	Asp	Glu
			180					185					190		
Ile	Thr	Gln	Asn	Met	Asn	Asp	Thr	Gln	Arg	Ser	Glu	Ile	Asn	Ser	Met
		195					200					205			
Val	Thr	Arg	Val	Ile	Ser	Arg	Trp	Ala	Gln	Asp	Tyr	Asn	Ile	Tyr	Phe
	210					215					220				
Lys	Arg	Tyr	Asn	Ser	Asp	Gln	Phe	Val	Ala	Tyr	Phe	Asn	Gln	Lys	Ile
225					230					235					240
Leu	Ala	Glu	Leu	Glu	Asp	Ser	Asn	Phe	Glu	Ile	Leu	Ser	Gln	Leu	Arg
				245					250					255	
Glu	Lys	Ser	Val	Gly	Tyr	Arg	Ala	Gln	Leu	Thr	Leu	Ser	Ile	Gly	Val
			260					265					270		
Gly	Glu	Gly	Thr	Glu	Asn	Leu	Ile	Asp	Leu	Gly	Glu	Leu	Ser	Gln	Ser
		275				280						285			
Gly	Leu	Asp	Leu	Ala	Leu	Gly	Arg	Gly	Gly	Asp	Gln	Val	Ala	Ile	Lys
	290					295					300				
Asn	Met	Asn	Gly	Asn	Val	Arg	Phe	Tyr	Gly	Gly	Lys	Thr	Asp	Pro	Met
305				310						315					320
Glu	Lys	Arg	Thr	Arg	Val	Arg	Ala	Arg	Val	Ile	Ser	His	Ala	Leu	Lys
				325					330					335	
Asp	Ile	Leu	Thr	Glu	Gly	Asp	Lys	Val	Ile	Val	Met	Gly	His	Lys	Arg
			340					345					350		
Pro	Asp	Leu	Asp	Ala	Ile	Gly	Ala	Ala	Ile	Gly	Val	Ser	Arg	Phe	Ala
		355				360						365			
Ser	Met	Asn	Asn	Leu	Glu	Ala	Phe	Ile	Val	Leu	Asn	Asp	Ser	Asp	Ile
	370					375					380				
Asp	Pro	Thr	Leu	Arg	Arg	Val	Met	Asp	Glu	Ile	Asp	Lys	Lys	Pro	Glu
385					390					395					400
Leu	Lys	Glu	Arg	Phe	Val	Thr	Ser	Asp	Glu	Ala	Trp	Asp	Met	Met	Thr
				405					410					415	
Ser	Lys	Thr	Thr	Val	Val	Val	Val	Asp	Thr	His	Lys	Pro	Glu	Met	Val
			420					425					430		
Leu	Asp	Glu	Asn	Val	Leu	Asn	Lys	Ala	Asn	Arg	Lys	Val	Val	Ile	Asp
		435					440					445			
His	His	Arg	Arg	Gly	Glu	Ser	Phe	Ile	Ser	Asn	Pro	Leu	Leu	Val	Tyr
	450					455					460				
Met	Glu	Pro	Tyr	Ala	Ser	Ser	Thr	Ala	Glu	Leu	Val	Thr	Glu	Leu	Leu
465					470					475					480
Glu	Tyr	Gln	Pro	Thr	Glu	Gln	Arg	Leu	Thr	Arg	Leu	Glu	Ser	Thr	Val
				485					490					495	

Met Tyr Ala Gly Ile Ile Val Asp Thr Arg Asn Phe Thr Leu Arg Thr
 500 505 510
 Gly Ser Arg Thr Phe Asp Ala Ala Ser Tyr Leu Arg Ala His Gly Ala
 515 520 525
 Asp Thr Ile Leu Thr Gln His Phe Leu Lys Asp Asp Val Asp Thr Tyr
 530 535 540
 Ile Asn Arg Ser Glu Leu Ile Arg Thr Val Lys Ile Gln Asp Gln Gly
 545 550 555 560
 Val Ala Ile Ala His Gly Ser Asp Asp Lys Ile Tyr His Pro Val Thr
 565 570 575
 Val Ala Gln Ala Ala Asp Glu Leu Leu Ser Leu Glu Gly Ile Glu Ala
 580 585 590
 Ser Tyr Val Val Ala Lys Arg Glu Asp Asn Leu Ile Gly Ile Ser Ala
 595 600 605
 Arg Ser Leu Gly Ser Ile Asn Val Gln Leu Thr Met Glu Ala Leu Gly
 610 615 620
 Gly Gly Gly His Leu Thr Asn Ala Ala Thr Gln Ile Lys Gly Ala Thr
 625 630 635 640
 Ile Asp Glu Ala Ile Glu Gln Leu Gln Gln Ala Ile Thr Glu Gln Met
 645 650 655
 Ser Arg Ser Glu Asp Ala
 660

<210> 6906

<211> 229

<212> PRT

<213> S.epidermidis

<400> 6906

Glu Arg Val Ser Met Ala Ser Tyr Leu Phe Phe His Pro Lys Pro Ala
 1 5 10 15
 Cys Asp Thr Tyr Gly Asp Met Asn Ile Tyr His Asp Lys Phe Gly Asn
 20 25 30
 Asn Glu Asp Pro Tyr Val Trp Ser Glu Arg Phe Leu His Ser Phe Cys
 35 40 45
 Lys Ile Thr Asp Tyr Ala Tyr Ser Lys Ser Thr Gln Lys Asp Ile Ile
 50 55 60
 Phe Trp Ile Ser Ile Asn Lys Glu Gly Asn Asn Leu Lys Tyr Leu Cys
 65 70 75 80
 Asp Leu Val Phe Lys Ile Glu Lys Trp Asp Phe Trp Tyr Lys Thr Phe
 85 90 95
 Ser Glu Gln Lys Asp Ala Ile Ala Thr Asn Lys Glu Leu Thr Ile Asn
 100 105 110
 Asp Ala Val Val Glu Gly Asp Glu Glu Ala Tyr Glu Tyr His Tyr Ser
 115 120 125
 Trp Ile Asn Arg Gly Glu His Lys Trp Glu Pro Thr Tyr Arg Arg Arg
 130 135 140
 Arg Leu Thr Leu Lys Ala Asp Pro Val Leu Ser Phe Gln Pro Gln Asn
 145 150 155 160
 Arg Gln Gly Asn Leu Asp Val Thr Glu Leu Leu Lys Thr Ile Val
 165 170 175
 Asn Phe Asn Val Glu Lys Ser Pro Ala Lys Ser Gly Thr Ser Tyr Lys
 180 185 190
 Ala Phe Glu Leu Glu Glu Glu Gln Ala Ser Lys Leu Tyr Glu Glu Ile
 195 200 205
 Lys Arg Leu Ser Phe Ile Arg Leu Lys Gly Arg Asp Leu Lys Asn Leu

210
Arg Arg Asn Phe Ser
225

215

220

<210> 6907
<211> 180
<212> PRT
<213> S.epidermidis

<400> 6907

Asn	Gly	Val	Ser	Asn	Val	Lys	Lys	Ile	Phe	Ala	Ser	Leu	Gly	Val	Ile
1				5					10					15	
Leu	Leu	Val	Ala	Ile	Leu	Gly	Val	Ala	Val	Val	Phe	Ala	Tyr	Gly	Ser
			20					25					30		
Tyr	Lys	Asp	Leu	Glu	Leu	Lys	Lys	Glu	Glu	Ala	Lys	Leu	Lys	Asp	Lys
		35					40					45			
Lys	Asn	Lys	Lys	Ile	Asp	Lys	Asn	Lys	Thr	Thr	Glu	Asn	Glu	Asn	Gln
	50					55					60				
Asp	Gln	Ile	Asn	Asn	Gln	Thr	Ile	Thr	Ala	Pro	Asn	Glu	Lys	Ala	Gln
65					70				75						80
Tyr	Gly	Asn	Asn	Leu	Gly	Val	Gln	Glu	Lys	Ser	Thr	Asp	Lys	Asn	Asp
			85					90						95	
Pro	Asn	Gly	Val	Leu	Arg	Phe	Asp	Thr	Asn	Gly	Asp	Gly	Leu	Ile	Ser
			100					105					110		
Thr	Ser	Glu	Val	Thr	Pro	Glu	Ala	Gln	Lys	Leu	Val	Asp	Glu	Gly	Lys
		115					120					125			
Leu	Gln	Pro	Ser	Ser	Asp	Arg	Met	Val	Glu	Glu	Trp	Thr	Lys	Asn	Lys
	130					135					140				
Asn	Asn	Val	Asp	Asn	Thr	Tyr	Asp	Tyr	Asp	Glu	Ser	Tyr	Lys	Lys	Gln
145					150					155					160
Gln	Glu	Met	Tyr	Lys	Lys	Ala	Ala	Arg	Gly	Glu	Val	Pro	Glu	Pro	Gly
				165					170					175	
Glu	Thr	Ile	Lys												
			180												

<210> 6908
<211> 234
<212> PRT
<213> S.epidermidis

<400> 6908

Tyr	Met	Ala	Arg	Lys	Val	Val	Val	Val	Asp	Asp	Glu	Lys	Pro	Ile	Ala
1				5					10					15	
Asp	Ile	Leu	Glu	Phe	Asn	Leu	Lys	Lys	Glu	Gly	Tyr	Asp	Val	Tyr	Cys
			20					25					30		
Ala	Tyr	Asp	Gly	Asn	Asp	Ala	Val	Asp	Leu	Ile	Tyr	Glu	Glu	Glu	Pro
		35					40					45			
Asp	Ile	Val	Leu	Leu	Asp	Ile	Met	Leu	Pro	Gly	Arg	Asp	Gly	Met	Glu
	50					55					60				
Val	Cys	Arg	Glu	Val	Arg	Lys	Lys	Tyr	Glu	Met	Pro	Ile	Ile	Met	Leu
65					70				75						80
Thr	Ala	Lys	Asp	Ser	Glu	Ile	Asp	Lys	Val	Leu	Gly	Leu	Glu	Leu	Gly
				85					90					95	
Ala	Asp	Asp	Tyr	Val	Thr	Lys	Pro	Phe	Ser	Thr	Arg	Glu	Leu	Ile	Ala
			100					105					110		
Arg	Val	Lys	Ala	Asn	Leu	Arg	Arg	His	Tyr	Ser	Gln	Pro	Ala	Gln	Glu

115 120 125
 Val Ser Gly Ala Thr Asn Glu Ile Thr Ile Lys Asp Ile Val Ile Tyr
 130 135 140
 Pro Asp Ala Tyr Ser Ile Lys Lys Arg Gly Glu Asp Ile Glu Leu Thr
 145 150 155 160
 His Arg Glu Phe Glu Leu Phe His Tyr Leu Ser Lys His Met Gly Gln
 165 170 175
 Val Met Thr Arg Glu His Leu Leu Gln Thr Val Trp Gly Tyr Asp Tyr
 180 185 190
 Phe Gly Asp Val Arg Thr Val Asp Val Thr Ile Arg Arg Leu Arg Glu
 195 200 205
 Lys Ile Glu Asp Asp Pro Ser His Pro Glu Tyr Ile Val Thr Arg Arg
 210 215 220
 Gly Val Gly Tyr Phe Leu Gln Gln His Asp
 225 230

<210> 6909
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6909
 Val Tyr Ala Ser Val Val Tyr Asp Ala Ser Asn Trp Ser Asn Glu Glu
 1 5 10 15
 Thr Ser Tyr Asp Ser Asp Lys His Asp Glu Ile Arg Asn Lys Ile Lys
 20 25 30
 Asn Glu Leu Glu Gln Leu Tyr Asn Ile
 35 40

<210> 6910
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6910
 Met Leu Asn Ser Leu Leu Ala Phe Phe Lys Glu Thr Ile Tyr Asn Val
 1 5 10 15
 Ile Met Asn Phe Tyr Ile Asn Lys Glu Ala Arg Leu Leu Trp Ile Leu
 20 25 30
 Ile Arg Leu Gln Val Phe Gln His Arg Trp Val Lys Val Leu Leu Glu
 35 40 45
 Leu

<210> 6911
 <211> 112
 <212> PRT
 <213> S.epidermidis

<400> 6911
 Lys Lys Ser Arg Arg Glu Gly Asn Ser Met Lys Ile Asn Arg Tyr Ile
 1 5 10 15
 Thr Arg Gly Ile Asn Glu Ser Ile Pro Leu Asp Leu Gln Ile Leu Leu
 20 25 30
 Trp His Met Val Glu Lys Lys Asp Asn Gln Pro His Thr Asp Tyr Leu
 35 40 45

His Ile Phe Lys Leu Gln Glu Asp Glu Asn Ile Leu Ser Ile Thr His
 50 55 60
 Glu Gln Glu Gln Pro Thr Tyr Lys Leu Glu Tyr His Tyr Thr Asn Tyr
 65 70 75 80
 Glu Lys Asn Gln Asn Ala Leu Pro Lys Lys Val Tyr Val Ile Arg Glu
 85 90 95
 Asp Asp Val Asp Ala Phe Tyr Tyr Val Met Leu Leu Pro Glu Glu Tyr
 100 105 110

<210> 6912
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 6912
 Leu Val Leu Ser Gly Thr Val Arg Leu Pro Arg Leu Tyr Arg His Glu
 1 5 10 15
 Tyr Phe Phe Tyr Gly Phe Leu Phe Phe Tyr Asn Asn Gly Leu Thr Ile
 20 25 30
 Phe Ser Glu Val Lys Val Ile Met Lys Leu Lys Leu Ile Ile Ala
 35 40 45

<210> 6913
 <211> 675
 <212> PRT
 <213> S.epidermidis

<400> 6913
 Ser Tyr Ile Arg Ser Ile Leu Met Lys Lys Ile Lys Ile Val Pro Leu
 1 5 10 15
 Ile Leu Ile Val Val Val Val Gly Phe Gly Ile Tyr Phe Tyr Ala Ser
 20 25 30
 Lys Asp Lys Glu Ile Asn Asn Thr Ile Asp Ala Ile Glu Asp Lys Asn
 35 40 45
 Phe Lys Gln Val Tyr Lys Asp Ser Ser Tyr Ile Ser Lys Ser Asp Asn
 50 55 60
 Gly Glu Val Glu Met Thr Glu Arg Pro Ile Lys Ile Tyr Asn Ser Leu
 65 70 75 80
 Gly Val Lys Asp Ile Asn Ile Gln Asp Arg Lys Ile Lys Lys Val Ser
 85 90 95
 Lys Asn Lys Lys Arg Val Asp Ala Gln Tyr Lys Ile Lys Thr Asn Tyr
 100 105 110
 Gly Asn Ile Asp Arg Asn Val Gln Phe Asn Phe Val Lys Glu Asp Gly
 115 120 125
 Met Trp Lys Leu Asp Trp Asp His Ser Val Ile Ile Pro Gly Met Gln
 130 135 140
 Lys Asp Gln Ser Ile His Ile Glu Asn Leu Lys Ser Glu Arg Gly Lys
 145 150 155 160
 Ile Leu Asp Arg Asn Asn Val Glu Leu Ala Asn Thr Gly Thr Ala Tyr
 165 170 175
 Glu Ile Gly Ile Val Pro Lys Asn Val Ser Lys Lys Asp Tyr Lys Ala
 180 185 190
 Ile Ala Lys Glu Leu Ser Ile Ser Glu Asp Tyr Ile Lys Gln Gln Met
 195 200 205
 Asp Gln Asn Trp Val Gln Asp Asp Thr Phe Val Pro Leu Lys Thr Val
 210 215 220

370 375 380
 Phe Gln Gly Arg Gln Tyr Lys Val Tyr Arg Gly Met Gly Ser Leu Gly
 385 390 395 400
 Ala Met Glu Lys Gly Ser Asn Asp Arg Tyr Phe Gln Glu Asp Lys Thr
 405 410 415
 Pro Arg Lys Phe Val Pro Glu Gly Ile Glu Gly Arg Thr Ala Tyr Lys
 420 425 430
 Gly Pro Leu Gln Asp Thr Ile Tyr Gln Leu Met Gly Gly Val Arg Ala
 435 440 445
 Gly Met Gly Tyr Thr Gly Ser Glu Asn Leu Lys Lys Leu Arg Glu Glu
 450 455 460
 Ala Gln Phe Thr Arg Met Gly Pro Ala Gly Leu Ala Glu Ser His Pro
 465 470 475 480
 His Asn Val Gln Ile Thr Lys Glu Ser Pro Asn Tyr Ser Phe
 485 490

<210> 6915
 <211> 65
 <212> PRT
 <213> S.epidermidis

<400> 6915
 Leu Gln Ile Ser Val Thr Ile Pro Ser Phe Leu Leu Trp Glu Ile Ile
 1 5 10 15
 Tyr Met Asp Cys Met Asn Tyr Val Tyr Asp Asn Leu Leu Leu Lys Leu
 20 25 30
 Val Lys Lys Lys Ile Ala Tyr Ile Lys Ser Gln Gln Val Ile Phe Asn
 35 40 45
 Arg Tyr Ile Arg Lys Phe Ile Leu Leu Tyr Lys Arg Tyr Phe Val Ile
 50 55 60
 Leu
 65

<210> 6916
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 6916
 Tyr Thr Gln Arg Glu His Leu Phe Leu Phe Tyr Leu Phe Tyr Leu Ile
 1 5 10 15
 Lys Ile Ile Ser Lys Arg Thr Ile Ile Ser Ile Asn Ile Asp Leu Ile
 20 25 30
 Tyr Leu Ile Gln Ile Leu Lys Glu Ser Asp Tyr His Asp
 35 40 45

<210> 6917
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 6917
 Leu Ile Lys Arg Leu Val His Arg Phe Thr Ala Ile Glu Asp Glu Glu
 1 5 10 15
 Ile Leu Asp Lys Ile Tyr Lys Asn Phe Met Asn Asp Asp Thr Ile Thr
 20 25 30

Thr Ile Phe Asn Asn Asn Leu Gln Ala Ile Ile Asn His Tyr Leu Ser
 35 40 45
 Ile

<210> 6918

<211> 48

<212> PRT

<213> S.epidermidis

<400> 6918

His Glu Lys Ser Thr His Thr Ile Phe Ile Gly Leu Asp Ala Leu Ile
 1 5 10 15
 Thr Ile Ile Asn Val Thr Gln Thr Ile Arg His His Gln His Leu Ser
 20 25 30
 Leu Ser Tyr Val Arg Ile Asp Lys His Thr Cys Phe Asn Cys Val Asn
 35 40 45

<210> 6919

<211> 236

<212> PRT

<213> S.epidermidis

<400> 6919

Trp Arg Lys Ser Arg Gly Val Ile Met Ile Glu Leu Arg Lys Ile Asn
 1 5 10 15
 Arg His Phe Lys Asn Gly Asn Glu Ser Asn His Ile Leu Lys Asp Ile
 20 25 30
 Asp Ile His Ile Asp Glu Gly Glu Phe Ile Ala Ile Met Gly Pro Ser
 35 40 45
 Gly Ser Gly Lys Ser Thr Leu Ile Asn Ile Leu Gly Phe Ile Asp Arg
 50 55 60
 Gly Tyr Glu Gly Glu Tyr Phe Phe Asn Asn Glu Asn Tyr Gln Lys Ser
 65 70 75 80
 Ser Asp Asn Lys Leu Ala Glu Ile Arg Asn His Thr Val Gly Phe Val
 85 90 95
 Phe Gln Asn Phe Lys Leu Ile Gln Asn Asn Thr Ile Leu Glu Asn Val
 100 105 110
 Ser Ile Pro Leu Ile Tyr Asn Gly Leu Ser Asn Lys Ala Arg Lys Ser
 115 120 125
 Lys Val Leu Asp Gly Leu His Asp Val Gly Leu Lys Gly Lys Glu Asn
 130 135 140
 Leu Leu Pro Asn Lys Leu Ser Gly Gly Gln Gln Gln Arg Val Ala Ile
 145 150 155 160
 Ala Arg Ala Ile Ile Asn Asp Pro Lys Phe Ile Ile Ala Asp Glu Pro
 165 170 175
 Thr Gly Ala Leu Asp Ser Lys Thr Ser Gln Asp Ile Met Glu Leu Phe
 180 185 190
 Val Lys Leu Asn Lys Glu Gln Asn Thr Thr Ile Ile Met Val Thr His
 195 200 205
 Asp Arg Glu Val Ala Glu Lys Ala Asp Arg Ile Ile His Ile Leu Asp
 210 215 220
 Gly Arg Val Gln Glu Glu Glu Val Leu Thr Arg Glu
 225 230 235

<210> 6920

<211> 133
 <212> PRT
 <213> S.epidermidis

<400> 6920

```

Met Glu Lys Arg Ser Ile Asn Met Lys Lys Val Phe Met Ile Ile Ser
1      5      10      15
Ile Leu Thr Ile Thr Val Thr Leu Ser Ala Cys Gly Gly Ser Gly Lys
      20      25      30
Gln Lys Glu Pro Ser Lys Glu Ser Gln Lys Ser Asp Lys Tyr Asp Tyr
      35      40      45
Val Tyr Tyr Glu Ile Leu Asn Asp Gly Asp Ser Glu Thr Pro Asn Val
      50      55      60
Glu Ile Lys Tyr Lys Asp Lys Lys Gly Lys Ser His Ile Glu Lys Ala
65      70      75      80
Asp Leu Asp His Val Tyr Glu His Ile Leu Gly Asp Gly Asn Lys Lys
      85      90      95
Pro Tyr Ile Val Lys Asp Gly Lys Lys Ile His Val Tyr Arg Pro Pro
      100      105      110
Tyr Met Ile Tyr Gly Asp Asp Asp Val Glu Gly Lys Ala Val Ser Lys
      115      120      125
Asp Glu Val Thr Lys
      130

```

<210> 6921
 <211> 385
 <212> PRT
 <213> S.epidermidis

<400> 6921

```

Thr Thr Gly Arg Ser Leu Asn Leu Met Met Glu Phe Thr Ile Lys Arg
1      5      10      15
Asp Tyr Phe Ile Asn Gln Leu Asn Asp Thr Leu Lys Ala Ile Ser Pro
      20      25      30
Arg Thr Thr Leu Pro Ile Leu Thr Gly Ile Lys Ile Asp Ala Lys Glu
      35      40      45
Asn Glu Val Ile Leu Thr Gly Ser Asp Ser Glu Ile Ser Ile Glu Ile
      50      55      60
Thr Ile Pro Lys Gln Val Asp Gly Glu Glu Ile Val Glu Ile Thr Glu
65      70      75      80
Thr Gly Ser Val Val Leu Pro Gly Arg Phe Phe Val Asp Ile Ile Lys
      85      90      95
Lys Leu Pro Gly Lys Glu Val Lys Leu Ser Thr Asn Glu Gln Phe Gln
      100      105      110
Thr Leu Ile Thr Ser Gly His Ser Glu Phe Asn Leu Ser Gly Leu Asp
      115      120      125
Pro Asp Gln Tyr Pro Leu Leu Pro Glu Val Ser Arg Asp Asp Ala Ile
      130      135      140
Gln Leu Ser Val Lys Val Leu Lys Asn Ile Ile Ala Gln Thr Asn Phe
145      150      155      160
Ala Val Ser Thr Ser Glu Thr Arg Pro Val Leu Thr Gly Val Asn Trp
      165      170      175
Leu Ile Gln Asp Asn Glu Leu Ile Cys Thr Ala Thr Asp Ser His Arg
      180      185      190
Leu Ala Val Arg Lys Leu Gln Leu Glu Asp Glu Ser Glu Asn Lys Asn
      195      200      205

```

Val Ile Ile Pro Gly Lys Ala Leu Ser Glu Leu Asn Lys Ile Met Ser
 210 215 220
 Asp Ser Asp Glu Asp Ile Asp Ile Phe Phe Ala Ser Asn Gln Val Leu
 225 230 235 240
 Phe Arg Val Gly Asn Ile Asn Phe Ile Ser Arg Leu Leu Glu Gly His
 245 250 255
 Tyr Pro Asp Thr Thr Arg Leu Phe Pro Glu Asn Tyr Glu Ile Lys Leu
 260 265 270
 Gly Ile Asn Asn Gly Asp Phe Tyr His Ala Ile Asp Arg Ala Ser Leu
 275 280 285
 Leu Ala Arg Glu Gly Gly Asn Asn Val Ile Lys Leu Ser Thr Gly Asn
 290 295 300
 Glu Leu Val Glu Leu Ser Ser Thr Ser Pro Glu Ile Gly Thr Val Lys
 305 310 315 320
 Glu Glu Val Asn Ala Asn Asp Val Glu Gly Gly Asn Leu Lys Ile Ser
 325 330 335
 Phe Asn Ser Lys Tyr Met Met Asp Ala Leu Lys Ala Ile Asp Asn Asp
 340 345 350
 Glu Val Glu Val Glu Phe Phe Gly Thr Met Lys Pro Phe Ile Leu Lys
 355 360 365
 Pro Lys Asp Asp Asp Ser Val Thr Gln Leu Ile Leu Pro Ile Arg Thr
 370 375 380
 Tyr
 385

<210> 6922
 <211> 90
 <212> PRT
 <213> S.epidermidis

<400> 6922
 Asn Lys Met Ser Gln Arg Arg Gln Leu Thr Met Ala Gly Gly Pro Arg
 1 5 10 15
 Arg Gly Gly Arg Arg Arg Lys Lys Val Cys Tyr Phe Thr Ala Asn Gly
 20 25 30
 Ile Thr His Ile Asp Tyr Lys Asp Thr Glu Leu Leu Lys Arg Phe Ile
 35 40 45
 Ser Glu Arg Gly Lys Ile Leu Pro Arg Arg Val Thr Gly Thr Ser Ala
 50 55 60
 Lys Tyr Gln Arg Met Leu Thr Thr Ala Ile Lys Arg Ala Arg His Met
 65 70 75 80
 Ala Leu Leu Pro Tyr Val Lys Glu Glu Gln
 85 90

<210> 6923
 <211> 132
 <212> PRT
 <213> S.epidermidis

<400> 6923
 Lys Glu Met Arg Lys Ile Ile Met Lys Ile Arg Leu Thr Phe Ile Ile
 1 5 10 15
 Leu Ala Ile Leu Ser Thr Ile Gly Leu Val Leu Val Leu Ala Lys Tyr
 20 25 30
 Pro Thr Gly Pro His Thr Ile Asn Tyr Asn Glu Pro Tyr Thr Val Leu
 35 40 45

Ile Ala Ile Thr Thr Ile Val Ile Met Ala Leu Pro Ala Leu Ile Leu
 50 55 60
 Gly Ile Phe Asn His Leu Ala Cys Arg Ile Ile Ser Ala Ile Leu Gln
 65 70 75 80
 Ile Ser Ala Leu Met Met Trp Gly Phe Leu Val Ile Ile Ser Leu Ile
 85 90 95
 Met Gly Gln Ile Val Ile Met Leu Met Ala Ser Leu Thr Ile Leu Ala
 100 105 110
 Leu Leu Val Ser Ser Ile Val Thr Leu Ser Val His Pro Ser Thr Ser
 115 120 125
 Asp Lys Ile Asn
 130

<210> 6924

<211> 126

<212> PRT

<213> S.epidermidis

<400> 6924

Ile Trp Met Arg Arg Val Ile Val Phe Gly Ile Ser Ile Ser Ser Ala
 1 5 10 15
 Ile Leu His Phe Val Ile Gly Gly Phe Ala Val Ala Leu Ala Ser Ile
 20 25 30
 Met Ala Asp Lys Val Gly Gly Lys Leu Gly Gly Ile Ile Ala Thr Met
 35 40 45
 Pro Ala Val Tyr Leu Ala Ala Ile Ile Ala Leu Ala Ile Asp His Lys
 50 55 60
 Gly Gln Gln Leu Ile Gln Met Ser Ile His Leu Ser Thr Gly Ala Ile
 65 70 75 80
 Val Gly Ile Val Ser Cys Ile Val Thr Val Phe Phe Thr Ser Ile Phe
 85 90 95
 Ile Gly Lys Lys Asn Tyr Arg Ser Gly Thr Val Phe Ala Ile Leu Cys
 100 105 110
 Trp Phe Val Ile Ser Val Ala Ile Phe Leu Val Arg His Ile
 115 120 125

<210> 6925

<211> 268

<212> PRT

<213> S.epidermidis

<400> 6925

Glu Arg Met Ser Arg Leu Ile Arg Met Ser Val Leu Ala Ser Gly Ser
 1 5 10 15
 Thr Gly Asn Ala Thr Tyr Val Glu Ser Glu Lys Gly Ser Leu Leu Val
 20 25 30
 Asp Val Gly Leu Thr Gly Lys Lys Met Glu Glu Leu Phe Ser Gln Ile
 35 40 45
 Asp Arg Asn Ile Lys Asp Leu Asn Gly Ile Leu Val Thr His Glu His
 50 55 60
 Ile Asp His Ile Lys Gly Leu Gly Val Leu Ala Arg Lys Tyr Lys Leu
 65 70 75 80
 Pro Ile Tyr Ala Asn Glu Asn Thr Trp Lys Ala Ile Glu Lys Lys Asp
 85 90 95
 Ser Arg Ile Pro Met Asp Gln Lys Phe Ile Phe Asn Pro Tyr Glu Thr
 100 105 110

Lys Ser Leu Ala Gly Phe Asp Ile Glu Ser Phe Asn Val Ser His Asp
 115 120 125
 Ala Ile Asp Pro Gln Phe Tyr Ile Phe His Asn Asn Tyr Lys Lys Phe
 130 135 140
 Thr Met Ile Thr Asp Thr Gly Tyr Val Ser Asp Arg Met Lys Gly Met
 145 150 155 160
 Ile Gln Gly Ser Asp Val Phe Met Phe Glu Ser Asn His Asp Val Asp
 165 170 175
 Met Leu Arg Met Cys Arg Tyr Pro Trp Lys Thr Lys Gln Arg Ile Leu
 180 185 190
 Ser Asp Met Gly His Val Ser Asn Glu Asp Ala Gly Leu Ala Met Ser
 195 200 205
 Asp Val Ile Thr Gly Asn Thr Lys Arg Ile Tyr Leu Ser His Leu Ser
 210 215 220
 Gln Asp Asn Asn Met Lys Asp Leu Ala Arg Met Ser Val Gly Gln Val
 225 230 235 240
 Leu Asn Glu His Asp Ile Asp Thr Glu Lys Glu Val Leu Leu Cys Asp
 245 250 255
 Thr Asp Lys Ala Gln Ala Thr Pro Ile Tyr Thr Leu
 260 265

<210> 6926

<211> 256

<212> PRT

<213> S.epidermidis

<400> 6926

Arg Ser Glu Arg Met Ala Ile Leu Thr Ala Asn Gln Leu Ser Lys Val
 1 5 10 15
 Tyr Gly His Lys Gln Lys Tyr Arg Ala Leu Asn Asn Ile Ser Phe Ser
 20 25 30
 Val Glu Lys Gly Glu Phe Val Ala Val Met Gly Pro Ser Gly Ser Gly
 35 40 45
 Lys Thr Thr Leu Leu Asn Val Leu Ser Ser Ile Asp Thr Ile Ser Gly
 50 55 60
 Gly Thr Val Glu Val Glu Gly Lys Glu Ile Asn Lys Leu Ser His Lys
 65 70 75 80
 Glu Val Ala Asn Phe Arg Lys Gln His Leu Gly Phe Ile Phe Gln Asp
 85 90 95
 Tyr Ser Val Leu Pro Thr Leu Thr Val Lys Glu Asn Ile Met Leu Pro
 100 105 110
 Leu Ser Val Gln Lys Phe His Lys Tyr Glu Met Glu Gln Asn Tyr Lys
 115 120 125
 Glu Val Ala Glu Ala Leu Gly Ile Tyr Asn Leu Gly Asn Lys Tyr Pro
 130 135 140
 Ser Glu Ile Ser Gly Gly Gln Gln Gln Arg Thr Ala Ala Ala Arg Ala
 145 150 155 160
 Phe Val His Lys Pro Thr Ile Ile Phe Ala Asp Glu Pro Thr Gly Ala
 165 170 175
 Leu Asp Ser Lys Ser Ala Gln Asp Leu Leu His Arg Leu Glu Asp Met
 180 185 190
 Asn Lys Gln Phe Asn Ser Thr Ile Met Met Val Thr His Asp Pro Ser
 195 200 205
 Ala Ala Ser Tyr Ala Glu Arg Val Ile Met Leu Lys Asp Gly Asp Ile
 210 215 220
 His Ser Glu Ile Tyr Gln Gly Asn Asp Ser Lys Gln Thr Phe Tyr Gln

```
<210> 6927
<211> 277
<212> PRT
<213> S.epidermidis
```

[illegible]

```
<210> 6928
<211> 196
<212> PRT
<213> S.epidermidis
```

Leu Phe Arg Arg Asn Leu Ser Met Ser Leu Ile Asn Lys Glu Ile Leu
1 5 10 15
Pro Phe Thr Ala Gln Ala Tyr Asp Pro Lys Lys Asp Glu Phe Lys Glu

Glu Gln Val Ile Ser Gln Lys Leu Asn Val Lys Gln Thr Glu Asp Arg
 210 215 220
 Val Arg Gln Lys Thr Gly Pro Glu Lys Val Lys Ala Gln Thr Phe Gln
 225 230 235 240
 Phe Ser Gln Asp Val Thr Gln Ala Lys Glu Glu Leu Gly Lys Ser Ile
 245 250 255
 Glu Thr Ile Glu Lys Ser Gly Ile Arg Val Glu Gln Lys Asp Lys Glu
 260 265 270
 His Glu Asp Tyr Tyr Glu Ile Lys Ile Lys Ile Tyr Lys Lys
 275 280 285

<210> 6930

<211> 172

<212> PRT

<213> S.epidermidis

<400> 6930

Glu Asn Phe Gly Ser Gly Ile Met Lys Leu Arg Ala Leu Glu Tyr Ser
 1 5 10 15
 Asp Leu Leu Phe Val His Glu Leu Asn Asn Glu Tyr Ser Ile Met Ser
 20 25 30
 Tyr Trp Phe Glu Glu Pro Tyr Glu Ser Leu Thr Glu Leu Gln His Leu
 35 40 45
 Phe Asp Lys His Leu Leu Asp Glu Ser Glu Arg Arg Phe Ile Val Glu
 50 55 60
 Asp Glu Asn Gln Val Val Gly Ile Val Glu Leu Val Glu Ile Asn Tyr
 65 70 75 80
 Ile His Arg Asn Cys Glu Ile Gln Ile Ile Lys Pro Glu Phe Ser
 85 90 95
 Gly Lys Gly Tyr Ala Lys Phe Ala Phe Glu Lys Ala Ile Ile Tyr Ala
 100 105 110
 Phe Asn Ile Leu Asn Met His Lys Ile Tyr Leu Tyr Val Asp Ala Asp
 115 120 125
 Asn Lys Lys Ala Ile His Ile Tyr Glu Ser Gln Gly Phe Lys Thr Glu
 130 135 140
 Gly Leu Leu Lys Glu Gln Phe Tyr Thr Lys Gly Lys Tyr Lys Asp Ala
 145 150 155 160
 Tyr Phe Met Ser Leu Leu Lys Ser Glu Tyr Ile Leu
 165 170

<210> 6931

<211> 328

<212> PRT

<213> S.epidermidis

<400> 6931

Arg Arg Tyr Gly Thr Ile Met Thr Asn Tyr Thr Val Asn Thr Leu Glu
 1 5 10 15
 Leu Gly Glu Phe Ile Thr Glu Ser Gly Glu Thr Ile Asp His Leu Arg
 20 25 30
 Leu Arg Tyr Glu His Val Gly Leu Pro Gly Gln Pro Leu Val Val Val
 35 40 45
 Cys His Ala Leu Thr Gly Asn His Leu Thr Tyr Gly Thr Asp Ala Gln
 50 55 60
 Pro Gly Trp Trp Arg Glu Ile Ile Asp Gly Gly Tyr Ile Pro Val His
 65 70 75 80

Asp Tyr Gln Phe Leu Thr Phe Asn Val Ile Gly Ser Pro Phe Gly Ser
 85 90 95
 Ser Ser Lys Leu Asn Asp Asp Asn Phe Pro Glu His Leu Thr Leu Arg
 100 105 110
 Asp Ile Val Arg Ala Ile Glu Leu Gly Ile Gln Ala Leu Glu Phe Lys
 115 120 125
 Lys Ile Asn Ile Leu Ile Gly Gly Ser Leu Gly Gly Met Gln Ala Met
 130 135 140
 Glu Leu Leu Tyr Asn Arg Gln Phe Glu Val Glu Lys Ala Ile Ile Leu
 145 150 155 160
 Ala Ala Thr Asp Lys Thr Ser Ser Tyr Ser Arg Ala Phe Asn Glu Ile
 165 170 175
 Ala Arg Gln Ala Ile His Ile Gly Gly Lys Glu Gly Leu Ser Ile Ala
 180 185 190
 Arg Gln Leu Gly Phe Leu Thr Tyr Arg Ser Ser Lys Ser Tyr Asp Gln
 195 200 205
 Arg Phe Thr Pro Asp Glu Val Val Ser Tyr Gln Gln His Gln Gly Asp
 210 215 220
 Lys Phe Lys Glu Tyr Phe Asp Leu Asn Cys Tyr Leu Thr Leu Leu Asp
 225 230 235 240
 Val Leu Asp Ser His His Leu Asp Arg Gly Arg Asp Asp Val Asp Glu
 245 250 255
 Val Phe Gln Ser Leu Glu Thr Lys Val Leu Thr Met Gly Phe Ile Asp
 260 265 270
 Asp Leu Leu Tyr Pro Asp Asp Gln Val Arg Ala Leu Gly Glu Arg Phe
 275 280 285
 Lys Tyr His Arg His Phe Phe Val Pro Asp Asn Val Gly His Asp Gly
 290 295 300
 Phe Leu Leu Asn Phe Asn Asp Trp Ala Pro Asn Leu Tyr His Phe Leu
 305 310 315 320
 Asn Leu Lys Gln Phe Arg Arg Lys
 325

<210> 6932

<211> 552

<212> PRT

<213> S.epidermidis

<400> 6932

Gln Ile His Gly Gly Gln Tyr Gly Asn Lys Thr Asn Gln His Arg Phe
 1 5 10 15
 Thr Val Asn Asp Ile Val Glu Thr Ile Pro Asp Asn Glu Phe Asp Glu
 20 25 30
 Phe Arg His His Arg Gly Ala Thr Ser Tyr His Pro Lys Met Met Leu
 35 40 45
 Lys Val Ile Leu Tyr Ala Tyr Thr Gln Ser Val Phe Ser Gly Arg Lys
 50 55 60
 Ile Glu Lys Met Leu Asn Asp Ser Ile Arg Met Met Trp Leu Ser Gln
 65 70 75 80
 Asn Gln Lys Pro Ser Tyr Lys Thr Ile Asn Gln Phe Arg Val Asn Pro
 85 90 95
 Lys Val Asp Ala Leu Leu Glu Ser Leu Phe Ile Gln Phe Tyr Ser Gln
 100 105 110
 Cys Val Lys Gln Asn Leu Ile Asp Asp Lys Ala Ile Phe Ile Asp Gly
 115 120 125
 Thr Lys Ile Glu Ala Asn Ala Asn Arg Tyr Thr Phe Val Trp Lys Lys

130		135		140
Ser Ile Gln Asn His Glu	Ser Lys Met Asn Glu	Asp Ser Lys Ala Leu		
145	150	155	160	
Tyr His Glu Leu Val Thr	Asn Lys Ile Ile Pro	Glu Ile Lys Glu Asp		
	165	170	175	
His Asp Asn Glu Leu Thr	Lys Glu Glu Ile Asp	Leu Ile Gly Ser His		
	180	185	190	
Leu Asp Lys Glu Ile Glu	Asp Leu Asn Gln His Ile	Asn Asn Glu Lys		
	195	200	205	
Cys Thr Lys Thr Arg Lys	Gln Ile Arg Leu Lys	Arg Thr Lys Ile Lys		
	210	215	220	
Lys Tyr Lys Lys Gln Ile	Asn Asp Tyr Phe Glu	Arg Lys Tyr Arg Tyr		
225	230	235	240	
Glu Phe Gln Lys Ser Ile	Leu Lys Asp Arg Asn	Ser Tyr Ser Lys Thr		
	245	250	255	
Asp Tyr Asp Ala Thr Phe	Met Arg Met Lys Glu	Asp His Met Lys Asn		
	260	265	270	
Gly Gln Leu Lys Pro Gly	Tyr Asn Leu Gln Ile Ala	Thr Asn Ser Gln		
	275	280	285	
Phe Val Leu Ser Tyr Asn	Val Tyr Gln Asn Pro Thr	Asp Thr Arg Thr		
	290	295	300	
Met Ile Pro Phe Leu Asn	Ser Ile Gln Glu Thr Tyr	Gly His Leu Pro		
305	310	315	320	
Glu Tyr Ile Val Ala Asp	Ala Gly Tyr Gly Ser	Glu Ser Asn Tyr Lys		
	325	330	335	
Ala Ile Ile Asp Asp Phe	Asn Arg Thr Pro Leu	Ile Thr Tyr Gly Met		
	340	345	350	
Phe Ile Lys Asp Lys Thr	Lys Lys Tyr Lys Ser	Asp Ile Phe Asn Thr		
	355	360	365	
Gln Asn Trp Asn Tyr Asp	Glu Ile Asn Asp Glu Phe	Ile Cys Pro Asn		
	370	375	380	
Asn Lys Arg Leu Gly Phe	Lys Arg Tyr Ala Tyr	Arg His Asp Lys Tyr		
385	390	395	400	
Gly Tyr Lys Arg Asp Phe	Lys Leu Tyr Glu Cys	Asp Asp Cys Ser Glu		
	405	410	415	
Cys Pro Leu Lys Asn Gln	Cys Met Asn Phe Asn	Ser Lys Thr Asn Lys		
	420	425	430	
Lys Ile Met Lys Asn Tyr	Asn Trp Glu Tyr Phe	Lys Ser Gln Ile Asn		
	435	440	445	
Lys Lys Leu Ser Glu Pro	Glu Thr Lys Asn Ile Tyr	Ser Gln Arg Lys		
	450	455	460	
Ile Asp Val Glu Pro Val	Phe Gly Phe Met Lys	Ala Ile Leu Gly Phe		
465	470	475	480	
Thr Arg Met Ser Val Arg	Gly Leu Asn Lys Val	Lys Arg Glu Leu Gly		
	485	490	495	
Phe Val Leu Met Ala Leu	Asn Ile Arg Lys Val	Val Ala Gln Arg Ala		
	500	505	510	
Glu Asn Asn Gln Lys Ile	Tyr Lys Lys Asp Asn	Phe Tyr Ile Ile Ser		
	515	520	525	
Ile Glu Ile Val Phe Phe	His Leu Ser Lys Asn	Phe Met Ser Arg Thr		
	530	535	540	
His Tyr Asp Leu Phe Phe	Tyr Cys			
545	550			

<210> 6933

<211> 78

<212> PRT

<213> S.epidermidis

<400> 6933

Thr Phe Asn Gly Asn Ala Pro Ala Leu Glu Arg Glu Val Asn Ala Lys
 1 5 10 15
 Ile Ser Thr Ser Ile Val Phe Phe Thr Tyr Leu Thr Gly Leu Ile Pro
 20 25 30
 Lys Thr Leu Ser Ile Ile Lys Trp Ile Ile Tyr Ile Val Ile Arg Ala
 35 40 45
 Ala Tyr Glu Ala Ile Lys Asn Leu Pro Asn Val Gln Ile Ala Glu Lys
 50 55 60
 Ser Leu Val Ala Arg Val Glu Ala Ile Ile Ala Lys Met Pro
 65 70 75

<210> 6934

<211> 467

<212> PRT

<213> S.epidermidis

<400> 6934

Ile Met Asp Gly Met Tyr Glu Gln Asn Gln Met Pro His Ser Asn Glu
 1 5 10 15
 Ala Glu Gln Ser Val Leu Gly Ala Ile Ile Ile Asp Pro Glu Leu Ile
 20 25 30
 Asn Thr Thr Gln Glu Val Leu Leu Pro Glu Ser Phe Tyr Arg Gly Ala
 35 40 45
 His Gln His Ile Phe Arg Ala Met Met His Leu Asn Glu Asp Asn Lys
 50 55 60
 Glu Ile Asp Val Val Thr Leu Met Asp Gln Leu Ser Ser Glu Gly Ser
 65 70 75 80
 Leu Asn Glu Ala Gly Gly Pro Gln Tyr Leu Ala Glu Leu Ser Thr Ser
 85 90 95
 Val Pro Thr Thr Arg Asn Val Gln Tyr Tyr Thr Asp Ile Val Phe Lys
 100 105 110
 His Ala Leu Lys Arg Lys Leu Ile Gln Thr Ala Asp Ser Ile Ala Asn
 115 120 125
 Asp Gly Tyr Asn Asp Glu Leu Glu Leu Asp Thr Ile Leu Ser Asp Ala
 130 135 140
 Glu Arg Arg Ile Leu Glu Leu Ser Ser Thr Arg Glu Ser Asp Gly Phe
 145 150 155 160
 Lys Asp Ile Arg Asp Val Leu Gly Gln Val Tyr Glu Thr Ala Glu Glu
 165 170 175
 Leu Asp Gln Asn Ser Gly Gln Thr Pro Gly Ile Pro Thr Gly Tyr Arg
 180 185 190
 Asp Leu Asp Gln Met Thr Ala Gly Phe Asn Arg Asn Asp Leu Ile Ile
 195 200 205
 Leu Ala Ala Arg Pro Ser Val Gly Lys Thr Ala Phe Ala Leu Asn Ile
 210 215 220
 Ala Gln Lys Val Ala Thr His Glu Asp Met Tyr Thr Val Gly Ile Phe
 225 230 235 240
 Ser Leu Glu Met Gly Ala Asp Gln Leu Ala Thr Arg Met Ile Cys Ser
 245 250 255
 Ser Gly Asn Val Asp Ser Asn Arg Leu Arg Thr Gly Thr Met Thr Glu
 260 265 270
 Glu Asp Trp Ser Arg Phe Thr Ile Ala Val Gly Lys Leu Ser Arg Thr

275 280 285
 Lys Ile Phe Ile Asp Asp Thr Pro Gly Ile Arg Ile Asn Asp Leu Arg
 290 295 300
 Ser Lys Cys Arg Arg Leu Lys Gln Glu His Gly Leu Asp Met Ile Val
 305 310 315 320
 Ile Asp Tyr Leu Gln Leu Ile Gln Gly Ser Gly Ser Arg Phe Ser Asp
 325 330 335
 Asn Arg Gln Gln Glu Val Ser Glu Ile Ser Arg Thr Leu Lys Ala Ile
 340 345 350
 Ala Arg Glu Leu Glu Cys Pro Val Ile Ala Leu Ser Gln Leu Ser Arg
 355 360 365
 Gly Val Glu Gln Arg Gln Asp Lys Arg Pro Met Met Ser Asp Ile Arg
 370 375 380
 Glu Ser Gly Ser Ile Glu Gln Asp Ala Asp Ile Val Ala Phe Leu Tyr
 385 390 395 400
 Arg Asp Asp Tyr Tyr Asn Arg Gly Glu Gly Asp Glu Asp Asp Asp Asp
 405 410 415
 Ala Gly Phe Glu Pro Gln Thr Asn Asp Asp Asn Gly Glu Ile Glu Ile
 420 425 430
 Ile Ile Ala Lys Gln Arg Asn Gly Pro Thr Gly Thr Val Lys Leu His
 435 440 445
 Phe Met Lys Gln Tyr Asn Lys Phe Thr Asp Ile Asp Tyr Ala His Ala
 450 455 460
 Asp Met Ser
 465

<210> 6935

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6935

Tyr Lys Phe Gly Ile Asn Phe Val Tyr Lys Ile Thr Glu Glu Leu Lys
 1 5 10 15
 Pro Gln Leu Tyr Phe Pro Leu Ile Phe Asn His Asp Asn His Ser Leu
 20 25 30
 Ser Ile Phe Glu Leu Ser Ile Ser Asn Gln Tyr
 35 40

<210> 6936

<211> 229

<212> PRT

<213> S.epidermidis

<400> 6936

Ile Ile Leu Gly Arg Gly Tyr Asn Met Glu Phe Lys Val Ile Glu Ser
 1 5 10 15
 Ala Lys Asp Pro Leu Phe Asn Glu Ala Leu Lys Leu Tyr Asp Asp Lys
 20 25 30
 Leu Asp Ile Gly Leu Asp Glu Asp Ser Lys Ile Phe Lys Arg Ser Leu
 35 40 45
 Glu Asn Asn Lys Thr Glu Asn Asp Tyr Ala Phe Ile Val Gly Ile Glu
 50 55 60
 Asn Gln Thr Val Val Ser Leu Ala Thr Ala His Tyr Glu Ala Thr Thr
 65 70 75 80
 Asn Ser Ala Phe Leu Ile Tyr Leu Ile Ala Lys Glu Ser Pro Asn His

				85					90					95			
Asp	Glu	Arg	Met	Ser	Leu	Thr	Leu	Glu	Ala	Ile	Glu	Lys	Gln	Leu	Asn		
			100					105					110				
Leu	Leu	Ser	Gln	Glu	Val	His	Asn	Arg	Asp	Ile	Asn	Phe	Ile	Met	Leu		
		115					120					125					
Glu	Val	Pro	Lys	Glu	Pro	Ser	Thr	Ala	Asn	Ile	Asp	Asp	Lys	Leu	Arg		
	130					135					140						
Asn	Ala	Leu	Glu	His	Arg	Arg	Gln	Phe	Leu	Phe	Glu	Asn	Gln	Phe	Glu		
145					150				155						160		
Lys	Gln	Asp	Asp	Ile	Asp	Tyr	Ile	His	Pro	Asn	Gln	Asn	Gln	Lys	Glu		
			165				170							175			
Thr	Pro	Gln	Lys	Val	Asp	Leu	Phe	Ile	Lys	Ala	Asn	Ile	Glu	Leu	Thr		
		180					185						190				
Lys	Asp	Ile	Tyr	Gly	Thr	Ser	Val	Lys	Ser	Asn	Tyr	Ile	Leu	Lys	Tyr		
	195					200					205						
Val	Phe	Ala	Asn	Gly	Ile	Ser	Arg	Glu	Ile	Ile	Tyr	Pro	Leu	Leu	Lys		
	210					215					220						
Glu	Met	Asn	Leu	Arg													
225																	

<210> 6937

<211> 258

<212> PRT

<213> S.epidermidis

<400> 6937

Ile	Leu	Ile	Gly	Val	Gly	Ile	Val	Ser	Asp	Tyr	Val	Tyr	Glu	Leu	Met		
1			5					10					15				
Lys	Gln	His	His	Ser	Val	Arg	Lys	Phe	Lys	Asn	Gln	Pro	Leu	Gly	Ser		
		20					25					30					
Glu	Thr	Val	Glu	Lys	Leu	Val	Glu	Ala	Gly	Gln	Ser	Ala	Ser	Thr	Ser		
	35					40					45						
Ser	Tyr	Leu	Gln	Thr	Tyr	Ser	Ile	Ile	Gly	Val	Glu	Asp	Pro	Ser	Ile		
	50				55				60								
Lys	Ala	Arg	Leu	Lys	Glu	Val	Ser	Gly	Gln	Pro	Tyr	Val	Leu	Asp	Asn		
65				70				75						80			
Gly	Tyr	Leu	Phe	Val	Phe	Val	Leu	Asp	Tyr	Tyr	Arg	His	His	Leu	Val		
			85					90					95				
Asp	Glu	Val	Ala	Ala	Ser	Asn	Met	Glu	Thr	Ser	Tyr	Gly	Ser	Ala	Glu		
		100					105					110					
Gly	Leu	Leu	Val	Gly	Thr	Ile	Asp	Val	Ala	Leu	Val	Ala	Gln	Asn	Met		
	115					120					125						
Ala	Val	Ala	Ala	Glu	Asp	Met	Gly	Tyr	Gly	Ile	Val	Tyr	Leu	Gly	Ser		
	130					135				140							
Leu	Arg	Asn	Asp	Val	Ala	Arg	Val	Arg	Glu	Ile	Leu	Asn	Leu	Pro	Asp		
145				150					155						160		
Tyr	Thr	Phe	Pro	Leu	Phe	Gly	Met	Ala	Val	Gly	Glu	Pro	Ser	Asp	Glu		
			165				170							175			
Glu	Asn	Gly	Ser	Pro	Lys	Pro	Arg	Leu	Pro	Phe	Lys	His	Ile	Phe	His		
	180					185						190					
Lys	Asp	Gln	Tyr	Asp	Ala	Asn	Gln	His	Gln	Gln	Arg	Lys	Glu	Leu	Glu		
	195					200					205						
Ala	Tyr	Asp	Gln	Val	Val	Ser	Glu	Tyr	Tyr	Lys	Glu	Arg	Thr	Asn	Gly		
	210					215				220							
Val	Arg	Thr	Glu	Asn	Trp	Ser	Gln	Gln	Ile	Glu	Thr	Phe	Leu	Gly	Arg		
225					230				235						240		

Lys Thr Arg Leu Asp Met Leu Asp Glu Leu Lys Lys Ala Gly Phe Ile
 245 250 255
 Gln Arg

<210> 6938
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 6938
 Ser Phe Val Gly Thr Arg Leu Ile Phe Lys Thr Thr Met Leu Asn Asp
 1 5 10 15
 Thr Leu Gln Tyr Leu Lys Leu Ser Phe Arg Ala Leu Thr Gly Ala Phe
 20 25 30
 Leu Leu Leu Leu His Lys Ile Lys Gln
 35 40

<210> 6939
 <211> 58
 <212> PRT
 <213> S.epidermidis

<400> 6939
 Ile Ala Val Gly Lys Lys Tyr Thr Leu Cys Val Val Ile Leu Arg Leu
 1 5 10 15
 Ser Leu Glu Ser Arg Ser Leu Ala Tyr Val Ile Val Glu Asn Thr Lys
 20 25 30
 Asn Lys Leu Leu Lys Thr Asn Lys Val Val Ser Ile His Leu Arg Cys
 35 40 45
 Gln Phe Asn Ile Val Thr Pro Arg Phe Ile
 50 55

<210> 6940
 <211> 549
 <212> PRT
 <213> S.epidermidis

<400> 6940
 Met Lys Lys Gly Cys Asn Ile Met Gln Gln Leu Lys Thr Lys Arg Val
 1 5 10 15
 Gly Ile Tyr Val Arg Val Ser Thr Glu Met Gln Ser Thr Glu Gly Tyr
 20 25 30
 Ser Ile Asp Gly Gln Ile Asn Gln Ile Lys Glu Tyr Cys Asp Phe His
 35 40 45
 His Phe Glu Val Lys Asp Ile Tyr Ala Asp Arg Gly Ile Ser Gly Lys
 50 55 60
 Ser Met Asn Arg Pro Glu Leu Gln Arg Met Leu Lys Asp Ala Lys Glu
 65 70 75 80
 Gly Asn Ile Asp Cys Val Met Val Tyr Lys Thr Asn Arg Leu Ala Arg
 85 90 95
 Asn Thr Ser Asp Leu Leu Lys Ile Val Glu Asp Leu His Lys Gln Asn
 100 105 110
 Val Glu Phe Phe Ser Leu Ser Glu Arg Met Glu Val Asn Thr Ser Ser
 115 120 125
 Gly Lys Leu Met Leu Gln Ile Leu Ala Ser Phe Ser Glu Phe Glu Arg

130	135	140
Asn Asn Ile Val Glu Asn Val Phe Met Gly Gln Thr Arg Arg Ala Gln		
145	150	155
Glu Gly Tyr Tyr Gln Gly Asn Leu Pro Leu Gly Tyr Asp Lys Ile Pro		160
	165	170
Asp Ser Lys His Glu Leu Met Ile Asn Gln His Glu Ala Asn Ile Val		175
	180	185
Lys Tyr Ile Phe Glu Cys Tyr Ala Lys Gly His Gly Tyr Arg Lys Ile		190
	195	200
Ala Asn Ala Leu Asn His Lys Gly Tyr Val Thr Lys Lys Gly Lys Pro		205
	210	215
Phe Ser Ile Ser Ser Ile Thr Tyr Ile Leu Ala Asn Pro Phe Tyr Ile		220
225	230	235
Gly Lys Ile Gln Phe Ala Lys Tyr Lys Asp Trp Ser Glu Lys Arg Arg		240
	245	250
Lys Gly Leu Asn Asp Lys Pro Val Ile Ala Glu Gly Lys His Ser Pro		255
	260	265
Ile Ile Asn Gln Asp Leu Trp Asp Lys Val Gln Met Arg Lys Lys Gln		270
	275	280
Val Ser Gln Lys Pro Gln Val His Gly Lys Gly Thr Asn Leu Leu Thr		285
	290	295
Gly Ile Ile His Cys Pro Gln Cys Gly Ala Pro Met Ala Ala Ser Asn		300
305	310	315
Thr Thr Asn Thr Leu Lys Asp Gly Thr Lys Lys Arg Ile Arg Tyr Tyr		320
	325	330
Ser Cys Ser Asn Phe Arg Asn Lys Gly Ser Lys Val Cys Ser Ala Asn		335
	340	345
Ser Val Arg Ala Asp Val Ile Glu Asp Tyr Val Met Lys Gln Ile Leu		350
	355	360
Glu Ile Val Lys Ser Asp Lys Val Ile Gln Arg Val Val Thr His Val		365
	370	375
Asn Gln Glu Asn Gln Val Asp Gly Ala Ala Leu His His Asp Ile Ala		380
385	390	395
Tyr Lys Gln Gln Gln Tyr Asp Glu Val Gln Ile Lys Ile Asn Asn Leu		400
	405	410
Ile Lys Thr Ile Glu Asp Asn Pro Asp Leu Thr Ser Val Ile Arg Pro		415
	420	425
Ser Ile Gln Lys Tyr Glu Lys Gln Leu Asn Asp Ile Thr Asn Gln Ile		430
	435	440
Asn Gln Leu Lys Asn Gln Gln Asn Glu Asp Lys Thr Leu Phe Asp Ala		445
	450	455
Lys Glu Ile Ser Lys Leu Leu Gln His Ile Phe His Asp Ile Lys His		460
465	470	475
Ile Glu Lys Ser Arg Leu Lys Ala Leu Tyr Leu Ser Val Ile Asp Arg		480
	485	490
Ile Asp Ile Lys Lys Asp Gly Asn His Lys Lys Gln Phe Tyr Val Thr		495
	500	505
Leu Lys Leu Asn Asn Glu Ile Ile Lys Gln Leu Phe Asn Asn Lys Gln		510
	515	520
Leu Asp Glu Val His Leu Ser Thr Ser Ser Leu Phe Leu Pro Gln Thr		525
	530	535
Leu Tyr Leu Thr Ile		540
545		

<210> 6941

<211> 78

<212> PRT

<213> S.epidermidis

<400> 6941

Leu	Val	Glu	Gly	His	Thr	Lys	Pro	Ser	Asp	Cys	Leu	Lys	Val	Arg	Asp
1				5					10					15	
Asp	Met	Leu	Gly	Lys	Cys	His	Lys	Leu	Phe	Thr	Glu	Arg	Lys	Glu	Phe
			20					25					30		
Thr	Gly	Asp	Thr	Pro	Val	Ile	Val	Asn	Ile	Gly	Glu	Trp	Asp	Glu	Gly
		35					40					45			
Asp	Glu	Glu	Asp	Lys	Gln	Arg	Ala	Leu	Asp	Lys	Ile	Lys	Glu	Asn	Tyr
	50					55					60				
Pro	Asn	Arg	Thr	Met	Ile	Val	Asp	Asp	Ile	Pro	Leu	Glu	Asp		
65					70					75					

<210> 6942

<211> 553

<212> PRT

<213> S.epidermidis

<400> 6942

Ile	Glu	Arg	Gly	Ile	Gln	Met	Thr	Gln	Asn	Ser	Tyr	Lys	Ile	Pro	Ile
1				5					10					15	
Gln	Gly	Met	Thr	Cys	Thr	Gly	Cys	Glu	Glu	His	Val	Thr	Glu	Ala	Leu
			20					25					30		
Glu	Gln	Ala	Gly	Ala	Lys	Asp	Val	Ser	Ala	Asp	Phe	Arg	Arg	Gly	Glu
		35					40					45			
Ala	Ile	Phe	Glu	Leu	Ser	Asp	Asp	Gln	Ile	Glu	Lys	Ala	Lys	Gln	Asn
	50					55					60				
Ile	Ser	Ala	Ala	Gly	Tyr	Gln	Pro	Gly	Glu	Glu	Ser	Gln	Pro	Ser	
65					70				75					80	
Glu	Asn	Ser	Val	Asp	Phe	Asn	Arg	Asp	Gly	Asp	Tyr	Asp	Leu	Leu	Ile
				85					90					95	
Ile	Gly	Ser	Gly	Gly	Ala	Ala	Phe	Ser	Ala	Ala	Ile	Lys	Ala	Asn	Glu
			100					105					110		
Asn	Gly	Ala	Lys	Val	Ala	Met	Val	Glu	Arg	Gly	Thr	Val	Gly	Gly	Thr
		115					120					125			
Cys	Val	Asn	Ile	Gly	Cys	Val	Pro	Ser	Lys	Thr	Met	Leu	Arg	Ala	Gly
	130					135					140				
Glu	Ile	Asn	Gly	Leu	Ala	Gln	Asn	Asn	Pro	Phe	Thr	Gly	Leu	Gln	Thr
145				150					155					160	
Ser	Thr	Gly	Ala	Ala	Asp	Leu	Ala	Gln	Leu	Thr	Glu	Gln	Lys	Asp	Gly
			165					170					175		
Leu	Val	Ser	Gln	Met	Arg	Gln	Glu	Lys	Tyr	Ile	Asp	Leu	Ile	Glu	Glu
		180					185					190			
Tyr	Gly	Phe	Asp	Leu	Ile	Arg	Gly	Glu	Ala	Ser	Phe	Ile	Asp	Asp	Lys
	195						200					205			
Thr	Ile	Gln	Val	Asn	Gly	Gln	Asn	Ile	Thr	Ser	Lys	Ser	Phe	Leu	Ile
	210					215					220				
Ala	Thr	Gly	Ala	Ser	Pro	Ala	Val	Pro	Glu	Ile	Pro	Gly	Met	Asn	Glu
225					230				235					240	
Val	Asp	Tyr	Leu	Thr	Ser	Thr	Ser	Ala	Leu	Glu	Leu	Lys	Glu	Val	Pro
			245					250					255		
Gln	Arg	Leu	Ala	Val	Ile	Gly	Ser	Gly	Tyr	Ile	Ala	Ala	Glu	Leu	Gly
		260						265					270		
Gln	Met	Phe	His	Asn	Leu	Gly	Thr	Glu	Val	Thr	Leu	Met	Gln	Arg	Ser

6941
 6942
 553
 PRT
 S.epidermidis

```

      275              280              285
Glu Arg Leu Phe Lys Thr Tyr Asp Pro Glu Ile Ser Glu Ala Ile Asp
  290              295              300
Glu Ser Leu Thr Glu Gln Gly Leu Asn Leu Ile Thr Gly Val Thr Tyr
  305              310              315              320
Gln Lys Val Glu Gln Asn Gly Lys Ser Thr Ser Ile Tyr Ile Glu Val
      325              330              335
Asn Gly Gln Glu Gln Val Ile Glu Ala Asp Gln Val Leu Val Ala Thr
      340              345              350
Gly Arg Lys Pro Asn Thr Glu Thr Leu Asn Leu Glu Ser Ala Gly Val
      355              360              365
Lys Thr Gly Lys Lys Gly Glu Val Leu Thr Asn Glu Tyr Leu Gln Thr
      370              375              380
Ser Asn Asn Arg Ile Tyr Ala Ala Gly Asp Val Thr Leu Gly Pro Gln
  385              390              395              400
Phe Val Tyr Val Ala Ala Tyr Glu Gly Gly Ile Val Ala Asn Asn Ala
      405              410              415
Leu Gly Leu Ala Lys Arg Lys Ile Asp Leu Arg Phe Val Pro Gly Val
      420              425              430
Thr Phe Thr Asn Pro Ser Ile Ala Thr Val Gly Leu Thr Glu Gln Gln
      435              440              445
Ala Lys Glu Lys Gly Tyr Asp Val Lys Thr Ser Val Leu Pro Leu Asp
      450              455              460
Ala Val Pro Arg Ala Leu Val Asn His Glu Thr Thr Gly Val Tyr Lys
  465              470              475              480
Leu Val Val Asn Ala Gln Thr Gln Lys Leu Ile Gly Ala His Ile Val
      485              490              495
Ser Glu Asn Ala Gly Asp Val Ile Tyr Ala Ala Thr Leu Ala Val Gln
      500              505              510
Phe Gly Leu Thr Ile Glu Asp Leu Thr Asp Ser Phe Ala Pro Tyr Leu
      515              520              525
Thr Met Ala Glu Gly Leu Lys Leu Ala Ala Leu Thr Phe Asp Lys Asp
      530              535              540
Val Ser Lys Leu Ser Cys Cys Ala Gly
  545              550

```

<210> 6943

<211> 204

<212> PRT

<213> S.epidermidis

<400> 6943

```

Ile Val Gly Gly Ile Ile Asn Val Phe Asn Thr Thr Tyr Lys Glu Ile
  1              5              10              15
Tyr Ser Met Phe Pro Asn Lys Pro Tyr Pro Val His Asp Ile Tyr Glu
      20              25              30
Asp Cys Arg Thr Ile Leu Ala Asp Leu Gln Ile Glu Met Phe Asn Arg
      35              40              45
Ile Asn Lys Gln Leu Tyr Lys Thr Cys His Tyr Asn Lys Pro Arg Lys
      50              55              60
His His Glu Met Ile Lys Lys Leu Leu Ile Glu Phe Ile Ile Asp Asn
      65              70              75              80
Lys Asp Ser Lys Ile Val Ser Ala Glu Pro Phe Glu Leu Asn Leu Glu
      85              90              95
Ala Phe Tyr Ala Ile Lys Gln Asn Cys Asn Ile Ser Asn Asn Asn Lys
      100              105              110

```

Pro Leu Asp Glu Tyr Ile Ile Thr Tyr Phe Glu Asp Leu Leu Ser Asn
 115 120 125
 Ile Ser Asn Thr Leu Thr Asn Asn Asn Arg Ala Asn Gly Asn Asn Pro
 130 135 140
 Ile Ile Asn Tyr Ile Tyr Val Thr Gln Arg Lys Asp Gly Met Val Cys
 145 150 155 160
 Val Val Gly Lys Ser His Phe Lys Tyr Glu Phe Lys Gly Asn Glu Tyr
 165 170 175
 Lys Leu Val Lys Asn Gln Glu Gly Asp Leu Leu Arg Arg Trp Met Lys
 180 185 190
 Ile Lys Val Pro Glu Lys Tyr Tyr Leu His Cys Ile
 195 200

<210> 6944

<211> 296

<212> PRT

<213> S.epidermidis

<400> 6944

Leu Lys Gly Gly Asp Ile Leu Asp Arg Ala Phe Arg Ile Leu Thr Ile
 1 5 10 15
 Tyr Asn Arg Leu Leu Gln Asn Lys Ser Val Asn Lys Gln Ser Leu Thr
 20 25 30
 Leu Glu Leu Asp Thr Ser Pro Arg Thr Ile Gln Arg Asp Ile Asp Asp
 35 40 45
 Ile Arg Asn Phe Leu Tyr Glu Ser Lys Ser Trp Ile Ser Ala Pro Lys
 50 55 60
 Glu Ile Thr Tyr Asp Tyr Lys Ser Glu Ser Tyr Lys Leu Glu Gln Asn
 65 70 75 80
 Lys Ser Glu Asn Met Tyr Phe Met Tyr Asp Ile Leu Thr Ala Leu Tyr
 85 90 95
 Leu Thr Thr Pro Lys Leu Ser His Tyr Phe Tyr Gln Tyr Leu Lys Leu
 100 105 110
 Leu Ile Val Lys His His Ser Asn Tyr Arg Thr Thr Leu Leu Lys Tyr
 115 120 125
 Leu Glu Arg Phe Glu Ile Asp Lys Asn Gln Thr Gly Ile Ser Thr Ser
 130 135 140
 Ser Leu Val Val Gln Ala Met Asn Glu Asn Gln Tyr Leu Gln Tyr Asn
 145 150 155 160
 Gln Asn Leu Leu Leu Pro Leu Ser Met Tyr Tyr Gln Met His Ala Phe
 165 170 175
 His Leu Val Tyr Arg Met Asn Asp Glu Ile His Ile Asp Asp Ile Asn
 180 185 190
 Gln Met Asn Leu Ser Leu Ser Glu Lys Ser Val Asp Thr His Glu Lys
 195 200 205
 Ser Lys Val Gln Thr Tyr Ile Thr Phe Glu Ile Ser Lys Asp Val Trp
 210 215 220
 Ser Lys Met His Arg Tyr Tyr Gln Ile His Val Ile Glu Lys Tyr Asp
 225 230 235 240
 Ala His Tyr Leu Ile Val Thr Phe Lys Met Thr Arg Ile Glu Ala Ile
 245 250 255
 Gln Leu Cys Phe Met Tyr Arg Ser Asn Ile Arg Ile Ile Ser Pro Pro
 260 265 270
 Asp Leu Lys Glu Gln Val Ile Asp Glu Leu Leu Leu Leu Gln Thr Thr
 275 280 285
 Tyr Leu Lys Gln Gln Val Gln Lys

290

295

<210> 6945

<211> 631

<212> PRT

<213> S.epidermidis

<400> 6945

Leu	Leu	Gly	Gly	Lys	Arg	Val	Val	Gln	Glu	Tyr	Asp	Val	Val	Val	Ile
1				5					10					15	
Gly	Ala	Gly	His	Ala	Gly	Ile	Glu	Ala	Gly	Leu	Ala	Ser	Ala	Arg	Arg
			20					25					30		
Gly	Ala	Lys	Thr	Leu	Met	Leu	Thr	Ile	Asn	Leu	Asp	Asn	Ile	Ala	Phe
		35					40					45			
Met	Pro	Cys	Asn	Pro	Ser	Val	Gly	Gly	Pro	Ala	Lys	Gly	Ile	Val	Val
	50					55					60				
Arg	Glu	Ile	Asp	Ala	Leu	Gly	Gly	Gln	Met	Ala	Lys	Thr	Ile	Asp	Lys
65					70					75					80
Thr	His	Ile	Gln	Met	Arg	Met	Leu	Asn	Thr	Gly	Lys	Gly	Pro	Ala	Val
				85					90					95	
Arg	Ala	Leu	Arg	Ala	Gln	Ala	Asp	Lys	Val	Leu	Tyr	Gln	Gln	Glu	Met
			100					105					110		
Lys	Arg	Val	Leu	Glu	Asn	Glu	Asp	Asn	Leu	Asp	Ile	Met	Gln	Gly	Met
		115					120					125			
Val	Asp	Glu	Leu	Ile	Ile	Glu	Asp	Asn	Glu	Val	Lys	Gly	Val	Arg	Thr
	130					135					140				
Asn	Ile	Gly	Thr	Glu	Tyr	Arg	Ser	Lys	Ala	Val	Ile	Ile	Thr	Thr	Gly
145					150					155					160
Thr	Phe	Leu	Arg	Gly	Glu	Ile	Ile	Leu	Gly	Asn	Leu	Lys	Tyr	Ser	Ser
				165					170					175	
Gly	Pro	Asn	His	Gln	Leu	Pro	Ser	Val	Thr	Leu	Ala	Asp	Asn	Leu	Arg
			180					185					190		
Lys	Leu	Gly	Phe	Asp	Ile	Val	Arg	Phe	Lys	Thr	Gly	Thr	Pro	Pro	Arg
		195					200					205			
Val	Asn	Ala	Arg	Thr	Ile	Asp	Tyr	Ser	Lys	Thr	Glu	Ile	Gln	Pro	Gly
	210					215					220				
Asp	Asp	Ile	Gly	Arg	Ala	Phe	Ser	Phe	Glu	Thr	Thr	Glu	Phe	Ile	Leu
225					230					235					240
Asn	Gln	Leu	Pro	Cys	Trp	Leu	Thr	Tyr	Thr	Asn	Gly	Asp	Thr	His	Gln
				245					250					255	
Val	Ile	Asp	Asp	Asn	Leu	His	Leu	Ser	Ala	Met	Tyr	Ser	Gly	Met	Ile
		260					265						270		
Lys	Gly	Thr	Gly	Pro	Arg	Tyr	Cys	Pro	Ser	Ile	Glu	Asp	Lys	Phe	Val
		275					280					285			
Arg	Phe	Asn	Asp	Lys	Pro	Arg	His	Gln	Leu	Phe	Leu	Glu	Pro	Glu	Gly
	290					295					300				
Arg	Asn	Thr	Asn	Glu	Val	Tyr	Val	Gln	Gly	Leu	Ser	Thr	Ser	Leu	Pro
305					310					315					320
Glu	His	Val	Gln	Arg	Gln	Met	Leu	Glu	Thr	Ile	Pro	Gly	Leu	Glu	Lys
				325					330					335	
Ala	Asp	Met	Met	Arg	Ala	Gly	Tyr	Ala	Ile	Glu	Tyr	Asp	Ala	Ile	Val
			340					345					350		
Pro	Thr	Gln	Leu	Trp	Pro	Thr	Leu	Glu	Thr	Lys	Ala	Ile	Lys	Asn	Leu
		355					360					365			
Tyr	Thr	Ala	Gly	Gln	Ile	Asn	Gly	Thr	Ser	Gly	Tyr	Glu	Glu	Ala	Ala
	370					375					380				

130		135		140
Gln Ile Pro Thr Cys Arg Val Ile Phe Thr Pro His Gln Lys Glu Trp				
145		150		155
Glu Arg Leu Ser Gly Ile Pro Ile Glu Glu Gln Thr Tyr Glu Arg Asn				
	165		170	175
Leu Glu Ala Val Glu Arg Ile Gly Ala Thr Val Val Leu Lys Gln His				
	180		185	190
Gly Thr Glu Ile Tyr Phe Cys Asn Asp Asp Val Tyr Lys Leu Pro Ile				
	195		200	205
Gly Thr Pro Ala Met Ala Thr Gly Gly Met Gly Asp Thr Leu Ala Gly				
	210		215	220
Met Ile Thr Ser Phe Val Gly Gln Phe Asp Asn Phe Lys Glu Ala Val				
225		230		235
Thr Ser Ala Thr Tyr Met His Ser Phe Ile Gly Glu Lys Leu Ser Asp				
	245		250	255
Thr Met Tyr Val Val Pro Pro Ser Arg Leu Ile Ser Glu Ile Pro Tyr				
	260		265	270
Val Met Lys Gln Leu Glu Gly				
275				

<210> 6947

<211> 246

<212> PRT

<213> S.epidermidis

<400> 6947

Thr Ser Lys Gly Glu Thr Ile Met Ser Ile Glu Trp Leu Ser Glu Lys				
1	5		10	15
Leu Ser Glu Gln Gly Ile Glu Leu Ser Asn Thr Gln Lys Glu Gln Phe				
	20		25	30
Gln Lys Tyr Tyr Lys Leu Leu Val Glu Trp Asn Lys Lys Met Asn Leu				
	35		40	45
Thr Ser Ile Thr Asp Glu His Asp Val Tyr Leu Lys His Phe Tyr Asp				
	50		55	60
Ser Ile Ala Pro Ser Phe Tyr Tyr Asp Phe Asn Gly Gln Leu Ser Leu				
65		70		75
Cys Asp Ile Gly Ala Gly Ala Gly Phe Pro Ser Ile Pro Leu Lys Ile				
	85		90	95
Val Tyr Pro Glu Leu Lys Val Thr Ile Val Asp Ser Leu Asn Lys Arg				
	100		105	110
Ile Gln Phe Leu Asn His Leu Ala Ala Glu Leu Gly Leu Glu Asp Val				
	115		120	125
Ser Phe Val His Asp Arg Ala Glu Ile Tyr Gly Lys Gly Val Tyr Arg				
	130		135	140
Glu Ser Tyr Asp Ile Val Thr Ala Arg Ala Val Ala Arg Leu Thr Val				
145		150		155
Leu Ser Glu Leu Cys Leu Pro Leu Val Lys Lys Gly Gly Gln Phe Leu				
	165		170	175
Ala Leu Lys Ser Lys Gly Glu Glu Leu Gln Glu Ala Thr Phe				
	180		185	190
Ala Ile Asn Ile Leu Gly Gly Asn Val Lys Glu Thr His Thr Phe Glu				
	195		200	205
Leu Pro Glu Asn Ala Gly Glu Arg Gln Met Ile Ile Ile Asp Lys Arg				
	210		215	220
Arg Gln Thr Ser Lys Lys Tyr Pro Arg Lys Pro Gly Thr Pro Asn Lys				
225		230		235
				240

Ser Pro Leu Val Glu Ser
245

<210> 6948
<211> 112
<212> PRT
<213> S.epidermidis

<400> 6948
Ile Ile Arg Gly Val Phe Phe Ser Met Lys Arg Val Ser Tyr Ser Val
1 5 10 15
Glu Thr Lys Tyr Lys Ala Val Glu Met Lys Ala Ala Gly Phe Ser Thr
20 25 30
Lys Glu Ile Met Lys Glu Leu Asn Ile Arg Asn Arg Thr Gln Val Lys
35 40 45
Thr Trp Trp Arg Trp Tyr Arg Asn Gly Glu Ser Tyr Arg Phe Ser Gln
50 55 60
His Val Gly Lys Gln Tyr Thr Tyr Gly Lys Gly Leu Glu Glu Leu Leu
65 70 75 80
Glu Val Glu Gln Leu Lys Leu Glu Asn Lys Arg Lys Asp Ile Glu Leu
85 90 95
Asp Ile Leu Lys Lys Tyr Lys Ala Leu Glu Arg Lys Trp Tyr Gln Gln
100 105 110

<210> 6949
<211> 53
<212> PRT
<213> S.epidermidis

<400> 6949
Ser Val Ile Leu Leu Leu Leu His Ile Tyr Asn Asn Met Tyr His Thr
1 5 10 15
Trp Ile Ser Leu Phe Ser Ile Cys Ile Lys Gln Ile Glu Leu Ile Pro
20 25 30
Gln Val Val Met Thr Phe Cys Glu Asn Asn Pro Ile Lys Leu Thr Leu
35 40 45
Phe Ile Asn Arg Lys
50

<210> 6950
<211> 40
<212> PRT
<213> S.epidermidis

<400> 6950
Val Ile Phe Ile Gln Leu Phe Lys Ile Tyr Phe Ile Ile Lys Asn Asn
1 5 10 15
Lys Gly Gly Asn Lys Asn Glu Lys Arg Lys Thr Phe Lys Ser Tyr Leu
20 25 30
Asn Cys Tyr Thr Thr Glu Ser Val
35 40

<210> 6951
<211> 189
<212> PRT
<213> S.epidermidis

<400> 6951

Asn Ser Phe Ile Gly His Thr Met Leu Leu Gly Lys Cys Leu Gly Gly
 1 5 10 15
 Met Ala Met Asp Ser His Leu Asn His Ile Leu Ser Tyr Trp Gln Gly
 20 25 30
 Pro Pro Leu Glu Gly Ala Lys Thr Ile Ile Ser Lys Tyr Gly Tyr Pro
 35 40 45
 Gln Glu Ala Thr Met Arg Arg Leu Ile Trp Tyr Asn Ser Gly Pro Trp
 50 55 60
 Lys Arg Thr Ile Val Tyr Lys Asp Pro Val Pro His Asn Phe Pro Thr
 65 70 75 80
 Pro His Leu Asp Phe Leu Lys Gln Thr Ile Asp Tyr Lys Val Pro Val
 85 90 95
 His Leu Tyr Asp Ala Ile Ala Ala Phe Asp Gly Ser Val Tyr Leu Asp
 100 105 110
 Arg Thr Thr Gly Glu Ala Ser Ala Lys Cys His Glu Glu Ala Met Asn
 115 120 125
 Phe Leu Ser Leu Asn Leu Leu Asn Asp Ile Val Thr Gly Lys Arg Asp
 130 135 140
 Val Gln Gly Ala Lys Ala Phe Tyr Ala Gln Thr Ala Glu Gln Phe Thr
 145 150 155 160
 Lys Tyr His Ile Thr Ser Pro Tyr Thr Glu Gly Phe Leu Phe Pro Met
 165 170 175
 Gln Tyr Asn Thr Ala Asp Leu Gly Val Thr Tyr Phe Lys
 180 185

<210> 6952

<211> 57

<212> PRT

<213> S.epidermidis

<400> 6952

Glu Leu Ile Met Asn Ile Tyr Gln Thr Tyr Ala Cys Leu Val Ile Gly
 1 5 10 15
 Ile Ile Val Asn Ser Thr Thr Thr Ile Leu Lys Arg Lys Lys Leu Ile
 20 25 30
 Ser Asn Ile Lys Gln Leu Trp Lys Ser Lys Lys Thr Leu Glu Glu Phe
 35 40 45
 Ile Arg Ser Asn Ser Arg Phe Asp Tyr
 50 55

<210> 6953

<211> 460

<212> PRT

<213> S.epidermidis

<400> 6953

Ile Tyr Ile Ile Thr Val Lys Gly Gly Ala Asp Met Lys Gln Val Ile
 1 5 10 15
 Gly Tyr Leu Arg Gln Ser Thr Met Lys Gln Gln Ser Leu Ala Ala Gln
 20 25 30
 Lys Gln Ala Ile Glu Ala Ile Ala Glu Lys His His Ile Gln His Ile
 35 40 45
 Asn Phe Tyr Ser Asp Lys Gln Ser Gly Arg Lys Asp Asn Arg Ser Gly
 50 55 60


```

Tyr Arg Gln Ile Thr Gln Leu Ile Gln Gln Gly Gln Cys Asp Ile Leu
65          70          75          80
Cys Cys Tyr Arg Leu Asn Arg Leu His Arg Asn Leu Lys Asn Ala Leu
      85          90          95
Lys Leu Ile Lys Leu Cys Gln Thr Tyr His Val His Ile Leu Ser Val
      100        105        110
His Asp Gly Tyr Phe Asp Met Asp Gln Ala Phe Asp Arg Leu Lys Leu
      115        120        125
Asn Ile Phe Ile Ser Leu Ala Glu Leu Glu Ser Asp Asn Ile Gly Glu
      130        135        140
Gln Val Arg Asn Gly Leu Gln Glu Lys Ala Lys Gln Gly Arg Leu Ile
      145        150        155        160
Thr Thr His Ala Pro Phe Gly Tyr Glu Tyr His Asn Gly Thr Phe Ile
      165        170        175
Ile Asn Gln Asn Glu Ser Pro Thr Val Lys Ala Val Phe Asn Tyr Tyr
      180        185        190
Ile Lys Gly His Gly Tyr Lys Lys Ile Ala Gln Leu Leu Glu Glu Asp
      195        200        205
Asn Thr Tyr Ile Asn Arg Gln Pro Tyr Gln Val Arg Asn Ile Ile Ile
      210        215        220
Asn Pro Asn Tyr Cys Gly Arg Val Asn Asn Gln Tyr Gly Gln Phe Asp
      225        230        235        240
Asn Met Phe Pro Ser Ile Val Ser Thr Ser Ile Tyr Glu Gln Ala Gln
      245        250        255
Arg Leu Arg Leu Gln Lys Gln Thr Lys Gln Thr Pro Ser Asp Asn Gln
      260        265        270
Leu Lys Gln Lys Ile Lys Cys Pro Cys Cys Asn Ala Thr Leu Thr Asn
      275        280        285
Met Thr Ile Arg Lys Lys Asn His Thr Leu Arg Tyr Tyr Val Cys Pro
      290        295        300
Lys Asn Met Asn Ala Ser Arg Phe Val Cys Asp Phe Lys Gly Ile Asn
      305        310        315        320
Ala Gln Thr Leu Glu Asp Lys Val Leu Glu Val Cys Arg Asp Phe Tyr
      325        330        335
Gln Asn Gln Arg Ile Tyr Thr Lys Ile Lys Ser Ala Ile Asp Lys Arg
      340        345        350
Ile Lys Arg Gln Arg Asn Ile Glu Lys His His Thr Leu Thr Gln Glu
      355        360        365
Gln Leu Ile Glu Lys Leu Ala Gln Gly Ile Ile Asp Ala Glu Thr Phe
      370        375        380
Arg Glu Gln Thr Gln Ser Leu Arg Gln Gln Pro Gln Arg Thr Thr Ser
      385        390        395        400
Ile Asn Gly His Gln Ile Gln His Ile Ile Gln Asn Ile Ile Gln Lys
      405        410        415
Arg Phe Thr Leu Asn Ile Leu Tyr Pro Tyr Ile Glu Thr Ile His Ile
      420        425        430
Thr Lys Asp Lys Asn Leu Ile Gly Ile Tyr Phe Lys Asn Glu Pro Leu
      435        440        445
Asn Ile Val Asn Gln Thr Met Gln Ser Ser Ile Ala
      450        455        460

```

<210> 6954

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6954

Leu Tyr Val Met Lys Ala Trp Asp Ile Asp Asn Leu Cys Pro Arg Leu
 1 5 10 15
 His Ser Gln Ser Tyr Ile Ile Tyr Asn Asn Ile Ala Thr Val Val Tyr
 20 25 30
 Arg His Gln Ser Tyr Leu Leu Ile Glu Asn
 35 40

<210> 6955

<211> 57

<212> PRT

<213> S.epidermidis

<400> 6955

Asn Tyr Thr Ile Asp Ser Thr Leu Gln Gln Asn Leu Tyr Phe Ala Ile
 1 5 10 15
 Ile Ile Lys Leu Ile Ala Phe Val Leu Val Phe Pro Gly Leu Leu Thr
 20 25 30
 Leu Trp Leu Ala Val Leu Ser Asp Thr Gly Ala Ala Ile Leu Val Ile
 35 40 45
 Leu Asn Ser Leu Arg Leu Leu Lys Lys
 50 55

<210> 6956

<211> 504

<212> PRT

<213> S.epidermidis

<400> 6956

Met Ala Thr Ile Gly Phe Glu Glu Lys Leu Trp Gln Ala Ala Asp Lys
 1 5 10 15
 Leu Arg Gly Ser Met Asp Ala Ala Glu Tyr Lys Asn Val Ala Leu Gly
 20 25 30
 Leu Ile Phe Leu Lys Tyr Val Ser Asp Ser Phe Glu Glu Lys Tyr Glu
 35 40 45
 Glu Leu Lys Gln Asp Pro Tyr Ala Asp Glu Glu Asp Gln Asp Glu Tyr
 50 55 60
 Leu Ala Glu Asn Ile Phe Trp Val Pro Lys Glu Ala Arg Trp Gln Tyr
 65 70 75 80
 Ile Asn Asp Asn Ala Lys Lys Pro Glu Ile Gly Gln Ile Ile Asp Lys
 85 90 95
 Ala Met Ile Ala Ile Glu Asn Glu Asn Glu Ser Leu Lys Gly Val Leu
 100 105 110
 Pro Lys Glu Tyr Ala Arg Pro Ala Leu Asp Lys Glu Lys Leu Gly Asp
 115 120 125
 Ile Ile Asp Leu Phe Thr Phe Lys Val Gly Asp Thr Glu Ser Arg Lys
 130 135 140
 Gln Asp Val Leu Gly Arg Val Tyr Glu Tyr Phe Ile Ala Lys Phe Ala
 145 150 155 160
 Ser Ala Glu Gly Lys Asn Ala Gly Glu Phe Tyr Thr Pro Ser Ser Ile
 165 170 175
 Val Lys Leu Leu Val Glu Met Ile Glu Pro Tyr Lys Gly Arg Ile Tyr
 180 185 190
 Asp Pro Cys Cys Gly Ser Gly Gly Met Phe Val Gln Ser Glu Arg Phe
 195 200 205
 Val Glu Lys His Gln Gly Arg Leu Asp Asp Ile Ala Ile Tyr Gly Gln

210 215 220
 Glu Ser Asn Pro Thr Thr Trp Lys Leu Ala Lys Met Asn Leu Ala Ile
 225 230 235 240
 Arg Gly Ile Asp Asn Asp Leu Gly Glu Arg Asn Ser Asp Thr Phe His
 245 250 255
 Asn Asp Leu His Lys Gly Leu Lys Ala Asp Tyr Ile Leu Ala Asn Pro
 260 265 270
 Pro Phe Asn Ala Ser Asp Trp Gly Gln Glu Arg Leu Leu Asp Asp Tyr
 275 280 285
 Arg Trp Gln Phe Gly Ile Pro Pro Lys Gly Asn Ala Asn Tyr Ala Trp
 290 295 300
 Ile Glu His Met Ile Ser Lys Leu Ala Pro Asn Gly Thr Ala Gly Phe
 305 310 315 320
 Val Leu Ala Asn Gly Ser Met Ser Thr Ser Gly Lys Asp Glu Leu Glu
 325 330 335
 Ile Arg Lys Asn Leu Ile Glu Gln Asp Leu Val Glu Cys Ile Val Thr
 340 345 350
 Leu Pro Gly Gln Leu Phe Tyr Ser Thr Gln Ile Pro Val Cys Leu Trp
 355 360 365
 Phe Ile Ser Asn Asn Lys Gly Gln Asn Gly Lys Lys Glu Arg Lys Asn
 370 375 380
 Glu Ile Leu Phe Ile Asp Ala Arg Glu Ile Gly His Met Val Ser Arg
 385 390 395 400
 Thr Leu Lys Glu Phe Ser Asp Glu Asp Ile Gln Lys Val Ala Gln Thr
 405 410 415
 Tyr His Ala Trp Arg Gly Thr Asn Asp Lys Pro Tyr Glu Asp Ile Ala
 420 425 430
 Gly Phe Cys Lys Val Ala Asn Leu Glu Glu Val Lys Asn Asn Glu Tyr
 435 440 445
 Ile Leu Thr Pro Gly Arg Tyr Val Gly Leu Ala Asp Val Glu Glu Glu
 450 455 460
 Glu Glu Pro Phe Glu Gln Lys Met Glu Arg Ile Thr Ser Glu Leu Ser
 465 470 475 480
 Glu Gln Phe Ala Lys Ser Lys Glu Leu Glu Asp Gln Ile Arg Lys Ser
 485 490 495
 Leu Glu Gly Leu Gly Tyr Gly Val
 500

<210> 6957

<211> 430

<212> PRT

<213> S.epidermidis

<400> 6957

Ile Met Thr Ile Leu Ala Ile Ile Ile Phe Leu Leu Thr Leu Met Phe
 1 5 10 15
 Val Ile Trp Gln Pro Lys Gly Leu Asp Ile Gly Ile Thr Ala Leu Ile
 20 25 30
 Gly Ala Ile Ile Ala Ile Ile Thr Gly Val Val Ser Leu Ser Asp Val
 35 40 45
 Ile Glu Val Thr Gly Ile Val Trp Asn Ala Thr Leu Thr Phe Val Ala
 50 55 60
 Val Ile Leu Ile Ser Leu Ile Leu Asp Glu Ile Gly Phe Phe Glu Trp
 65 70 75 80
 Ala Ala Ile His Met Val Arg Ala Ser Asn Gly His Gly Phe Lys Met
 85 90 95

6957
 430
 PRT
 S.epidermidis

```

Phe Val Tyr Ile Met Leu Leu Gly Ala Ile Val Ala Ala Phe Phe Ala
      100      105      110
Asn Asp Gly Ala Ala Leu Ile Leu Thr Pro Ile Val Leu Ala Met Val
      115      120      125
Arg Asn Leu Gly Phe Asn Gln Lys Val Ile Phe Pro Phe Ile Ile Ala
      130      135      140
Ser Gly Phe Ile Ala Asp Thr Thr Ser Leu Pro Leu Ile Val Ser Asn
      145      150      155      160
Leu Val Asn Ile Val Ser Ala Asp Tyr Phe Asn Ile Gly Phe Ile Glu
      165      170      175
Tyr Val Ser Arg Met Ile Ile Pro Asn Ile Phe Ser Leu Ile Ala Ser
      180      185      190
Ile Val Val Leu Trp Leu Tyr Phe Arg Lys Val Ile Pro Asn Asn Phe
      195      200      205
Glu Ile Lys Asn Leu Lys Thr Pro Asn Gln Ala Ile Lys Asp Pro Lys
      210      215      220
Leu Phe Lys Phe Ser Trp Ile Val Leu Ser Ile Leu Leu Ile Gly Tyr
      225      230      235      240
Ile Val Ser Glu Phe Ile Gln Ile Pro Val Ser Leu Ile Ala Cys Leu
      245      250      255
Ile Ala Leu Ile Phe Thr Val Leu Ala Tyr Lys Ser Arg Val Val Asn
      260      265      270
Thr Lys Gln Val Ile Lys Gly Ala Pro Trp Asn Ile Val Leu Phe Ser
      275      280      285
Ile Gly Met Tyr Leu Val Val Phe Gly Leu Lys Asn Val Gly Ile Thr
      290      295      300
Ala Leu Leu Ala Asn Ile Leu Ser Ser Ile Ser Asn Tyr Gly Leu Phe
      305      310      315      320
Ser Ser Val Ile Gly Met Gly Phe Ile Ser Ala Phe Leu Ser Ala Ile
      325      330      335
Met Asn Asn Met Pro Thr Val Leu Ile Asp Ala Ile Ala Ile Gly Gln
      340      345      350
Ser Ala Thr Thr Gly Leu Ile Lys Glu Gly Met Ile Tyr Ala Asn Ile
      355      360      365
Ile Gly Ala Asp Leu Gly Pro Lys Ile Thr Pro Ile Gly Ser Leu Ala
      370      375      380
Thr Leu Leu Trp Leu His Val Leu Thr Gln Lys Gly Val Lys Ile Ser
      385      390      395      400
Trp Gly Thr Tyr Phe Lys Thr Gly Ile Val Ile Thr Ile Pro Val Leu
      405      410      415
Phe Ile Thr Leu Val Gly Leu Tyr Val Thr Leu Ile Val Phe
      420      425      430

```

<210> 6958

<211> 63

<212> PRT

<213> S.epidermidis

<400> 6958

```

Lys Leu Asn Ile Pro Ile His Ala Tyr Ile Ser Ile Ile Lys Asn Thr
1      5      10      15
Val Ile Thr Ala Leu Leu Thr Tyr Thr Lys Thr Ile Lys Tyr Asp Asp
      20      25      30
Lys Pro Lys Gln Lys Arg Gln Ala Tyr Cys Lys Ser Leu Thr Tyr Phe
      35      40      45
Ala Glu Leu Tyr Phe Asn Gly Lys Ile Ile Asn Asn Ile Ile Leu

```

50

55

60

<210> 6959
 <211> 138
 <212> PRT
 <213> S.epidermidis

<400> 6959

Gly	Asp	Asn	Met	Glu	Met	Lys	Ile	Ser	Glu	Leu	Ala	Lys	Ala	Cys	Asp
1				5					10					15	
Val	Asn	Lys	Glu	Thr	Val	Arg	Tyr	Tyr	Glu	Arg	Lys	Gly	Leu	Ile	Ala
			20					25					30		
Gly	Pro	Pro	Arg	Asn	Glu	Ser	Gly	Tyr	Arg	Ile	Tyr	Ser	Glu	Glu	Thr
			35				40					45			
Ala	Asp	Arg	Val	Arg	Phe	Ile	Lys	Arg	Met	Lys	Glu	Leu	Asp	Phe	Ser
	50					55					60				
Leu	Lys	Glu	Ile	His	Leu	Leu	Phe	Gly	Val	Val	Asp	Gln	Asp	Gly	Glu
65				70					75					80	
Arg	Cys	Lys	Asp	Met	Tyr	Ala	Phe	Thr	Val	Gln	Lys	Thr	Lys	Glu	Ile
			85					90						95	
Glu	Arg	Lys	Val	Gln	Asp	Leu	Leu	Arg	Ile	Gln	Arg	Leu	Leu	Glu	Glu
			100					105					110		
Leu	Lys	Glu	Lys	Cys	Pro	Asp	Glu	Lys	Ala	Ile	Tyr	Thr	Cys	Pro	Ile
		115				120						125			
Ile	Glu	Thr	Leu	Met	Gly	Gly	Pro	Asp	Lys						
	130					135									

<210> 6960
 <211> 314
 <212> PRT
 <213> S.epidermidis

<400> 6960

Lys	Glu	Asp	Ile	Asn	Met	Ser	Lys	Ile	Val	Val	Ala	Leu	Gly	Gly	Asn
1				5					10					15	
Ala	Leu	Gly	Gln	Ser	Pro	Lys	Glu	Gln	Leu	Asp	Leu	Leu	Lys	Ser	Thr
			20					25					30		
Ser	Lys	Ser	Leu	Val	Ser	Leu	Ile	Asp	Lys	Gly	Tyr	Glu	Ile	Val	Ile
			35				40					45			
Ser	His	Gly	Asn	Gly	Pro	Gln	Val	Gly	Ser	Ile	Asn	Leu	Gly	Leu	Asn
	50					55					60				
Tyr	Ala	Ala	Glu	His	Lys	Gln	Gly	Pro	Pro	Phe	Pro	Phe	Pro	Glu	Cys
65				70					75					80	
Gly	Ala	Met	Ser	Gln	Ala	Tyr	Ile	Gly	Tyr	Gln	Met	Gln	Glu	Ser	Leu
			85					90						95	
Gln	Asn	Glu	Leu	His	Ser	Met	Gly	Ile	Asp	Lys	Gln	Val	Val	Thr	Leu
			100					105					110		
Val	Thr	Gln	Val	Gln	Val	Ala	Ser	Asp	Asp	Ser	Ala	Phe	Asn	Asn	Pro
		115					120					125			
Thr	Lys	Pro	Ile	Gly	Leu	Phe	Tyr	Thr	Lys	Glu	Gln	Ala	Asp	Lys	Phe
	130					135					140				
Thr	Lys	Glu	Lys	Gly	Tyr	Thr	Phe	Val	Glu	Asp	Ser	Gly	Arg	Gly	Tyr
145					150				155					160	
Arg	Arg	Val	Val	Pro	Ser	Pro	Gln	Pro	Ile	Ser	Ile	Val	Glu	Leu	Asp
				165				170						175	
Ser	Ile	Glu	Thr	Leu	Ile	Thr	His	Gly	Thr	Leu	Val	Ile	Ala	Ala	Gly

6959 6960 314

Asp His Gly Thr Tyr Pro Phe Val Thr Ser Ser Asn Pro Val Ala Gly
 260 265 270
 Asn Val Thr Val Gly Thr Gly Val Gly Pro Thr Ser Val Ser Lys Val
 275 280 285
 Ile Gly Val Cys Lys Ser Tyr Thr Ser Arg Val Gly Asp Gly Pro Phe
 290 295 300
 Pro Thr Glu Leu Phe Asp Glu Asp Gly His His Ile Arg Glu Val Gly
 305 310 315 320
 Arg Glu Tyr Gly Thr Thr Thr Gly Arg Pro Arg Arg Val Gly Trp Phe
 325 330 335
 Asp Ser Val Val Leu Arg His Ser Arg Arg Val Ser Gly Ile Thr Asp
 340 345 350
 Leu Ser Ile Asn Ser Ile Asp Val Leu Thr Gly Leu Asp Thr Val Lys
 355 360 365
 Ile Cys Thr Ala Tyr Glu Leu Asp Gly Glu Lys Ile Thr Glu Tyr Pro
 370 375 380
 Ala Asn Leu Asp Gln Leu Arg Arg Cys Lys Pro Ile Phe Glu Glu Leu
 385 390 395 400
 Pro Gly Trp Thr Glu Asp Ile Thr Gly Cys Arg Ser Leu Asp Glu Leu
 405 410 415
 Pro Glu Asn Ala Arg Asn Tyr Leu Glu Arg Ile Ser Glu Leu Cys Gly
 420 425 430
 Val His Ile Ser Ile Phe Ser Val Gly Pro Asp Arg Glu Gln Thr Asn
 435 440 445
 Leu Leu Glu Gln Leu Trp
 450

<210> 6962

<211> 311

<212> PRT

<213> S.epidermidis

<400> 6962

Ser Lys Ser Met Gly Val Ala Tyr Val Phe Ser Lys Ile Gln Pro Lys
 1 5 10 15
 Ala Thr Ile Leu Ala Ile Ile Ser Leu Leu Val Val Ala Leu Val Thr
 20 25 30
 His Val Leu Pro Val Leu Gly Leu Ile Leu Cys Leu Phe Ala Thr Ile
 35 40 45
 Pro Gly Ile Val Leu Trp Asn Arg Ser Ile Gln Ser Phe Gly Ile Ser
 50 55 60
 Ala Leu Val Thr Val Val Leu Thr Thr Leu Leu Gly Asn Thr Phe Val
 65 70 75 80
 Leu Ser Met Met Val Leu Ile Leu Leu Leu Ser Ala Ile Ile Gly Gln
 85 90 95
 Leu Leu Lys Glu Arg Thr Ser Lys Glu Arg Ile Leu Tyr Ile Ser Thr
 100 105 110
 Ala Ser Leu Ser Leu Val Thr Leu Ile Gly Trp Met Leu Leu Gln Thr
 115 120 125
 Phe Asp Lys Ile Pro Thr Ala Ala Val Leu Ile Lys Pro Phe Lys Asn
 130 135 140
 Ala Met His Glu Ala Phe Leu Thr Ser Gly Ile Asp Ser Asn Tyr Arg
 145 150 155 160
 Gln Ile Leu Glu Glu Ser Phe Arg Gln Met Thr Val Gln Leu Pro Ser
 165 170 175
 Phe Leu Ile Ile Val Ile Phe Ile Phe Val Leu Ile Asn Leu Ile Ile

			180					185					190				
Thr	Phe	Pro	Ile	Leu	Arg	Lys	Phe	Lys	Val	Ala	Thr	Pro	Ile	Phe	Lys		
		195					200					205					
Pro	Leu	Phe	Ala	Trp	Gln	Met	Ser	Arg	Asn	Leu	Leu	Trp	Phe	Tyr	Leu		
	210					215					220						
Ile	Val	Leu	Ile	Cys	Val	Met	Ile	Ala	Ser	Glu	Pro	Ser	Thr	Phe	Gln		
225					230					235					240		
Ser	Ile	Val	Leu	Asn	Phe	Asp	Val	Val	Leu	Ser	Leu	Val	Met	Tyr	Ile		
				245					250					255			
Gln	Gly	Leu	Ser	Val	Ile	His	Phe	Phe	Gly	Lys	Ala	Lys	Arg	Trp	Pro		
			260				265						270				
Asn	Phe	Ala	Thr	Ile	Leu	Val	Met	Val	Val	Gly	Thr	Leu	Leu	Thr	Pro		
		275					280						285				
Ala	Thr	His	Ile	Val	Gly	Leu	Gly	Val	Ile	Asp	Leu	Cys	Ile	Asn			
	290					295				300							
Leu	Lys	Lys	Ile	Ile	Lys	Lys											
305					310												

<210> 6963

<211> 110

<212> PRT

<213> S.epidermidis

<400> 6963

Leu	Gly	Gly	Ile	Phe	Met	Ser	Tyr	Lys	Glu	Leu	Ser	Ala	Ile	Leu	Lys		
1			5					10					15				
Val	Leu	Ser	Asp	Pro	Ser	Arg	Leu	Glu	Ile	Leu	Asp	Leu	Leu	Ser	Cys		
			20				25					30					
Gly	Glu	Leu	Cys	Ala	Cys	Asp	Leu	Leu	Ala	Tyr	Phe	Gln	Phe	Ser	Gln		
		35					40				45						
Pro	Thr	Leu	Ser	His	His	Met	Lys	Ile	Leu	Val	Asp	Asn	Glu	Leu	Val		
	50				55					60							
Ser	Thr	Arg	Lys	Asp	Gly	Thr	Lys	Arg	Met	Tyr	Arg	Leu	Asn	His	Thr		
65				70					75					80			
Phe	Leu	Asp	Ser	Ile	Asn	Lys	Glu	Leu	Thr	Tyr	Ile	Ser	Ser	Pro	Thr		
			85				90						95				
Gln	Gln	Cys	Met	Cys	Lys	Lys	Ile	Lys	Thr	Gly	Glu	Cys	Lys				
		100					105						110				

<210> 6964

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6964

Asn	Lys	Ile	Phe	Thr	Asn	Asn	Leu	Lys	Asn	Lys	Leu	Asn	His	His	Arg		
1			5					10					15				
Phe	Lys	Leu	Ile	Phe	Ile	Lys	Leu	Arg	Tyr	Ser	Leu	Asn	Tyr	Lys	Phe		
		20					25					30					
Leu	Ile	Phe	Ser	Lys	Tyr	Ile	His	Lys									
	35					40											

<210> 6965

<211> 518

<212> PRT

<213> S.epidermidis

<400> 6965

Arg	Arg	Phe	Met	Thr	Met	Glu	Met	Ala	Lys	Glu	Gln	Glu	Leu	Ile	Leu
1				5					10					15	
Val	Leu	Asp	Phe	Gly	Ser	Gln	Tyr	Asn	Gln	Leu	Ile	Thr	Arg	Arg	Ile
			20					25					30		
Arg	Glu	Met	Gly	Val	Tyr	Ser	Glu	Leu	His	Asp	His	Glu	Ile	Ser	Ile
		35					40					45			
Glu	Glu	Ile	Lys	Arg	Met	Asn	Pro	Lys	Gly	Ile	Ile	Leu	Ser	Gly	Gly
	50					55					60				
Pro	Asn	Ser	Val	Tyr	Glu	Gly	Ser	Phe	Thr	Ile	Asp	Pro	Glu	Ile	
65					70				75					80	
Tyr	Asn	Leu	Gly	Ile	Pro	Val	Leu	Gly	Ile	Cys	Tyr	Gly	Met	Gln	Leu
				85					90					95	
Thr	Thr	Lys	Leu	Leu	Gly	Gly	Lys	Val	Glu	Arg	Ala	Asn	Glu	Arg	Glu
			100					105					110		
Tyr	Gly	Lys	Ala	Thr	Ile	Asn	Ala	Lys	Ser	Asp	Glu	Leu	Phe	Phe	Gly
		115					120					125			
Leu	Pro	Ser	Glu	Gln	Thr	Val	Trp	Met	Ser	His	Ser	Asp	Lys	Val	Ile
	130					135					140				
Glu	Ile	Pro	Glu	Gly	Phe	Glu	Val	Ile	Ala	Asp	Ser	Pro	Ser	Thr	Asn
145					150					155					160
Tyr	Ala	Ala	Ile	Glu	Asp	Lys	Lys	Arg	Arg	Ile	Tyr	Gly	Val	Gln	Phe
				165					170					175	
His	Pro	Glu	Val	Arg	His	Thr	Glu	Tyr	Gly	Asn	Asp	Leu	Leu	Arg	Asn
			180					185					190		
Phe	Val	Arg	Arg	Val	Cys	Asn	Cys	Thr	Gly	Glu	Trp	Thr	Met	Glu	Asn
		195					200					205			
Phe	Ile	Glu	Ile	Glu	Ile	Glu	Lys	Ile	Arg	Gln	Gln	Val	Gly	Asn	Arg
	210					215					220				
Lys	Val	Leu	Cys	Ala	Met	Ser	Gly	Gly	Val	Asp	Ser	Ser	Val	Val	Ala
225					230					235					240
Val	Leu	Leu	His	Lys	Ala	Ile	Gly	Asp	Gln	Leu	Thr	Cys	Ile	Phe	Val
				245					250					255	
Asp	His	Gly	Leu	Leu	Arg	Lys	Gly	Glu	Gly	Asp	Met	Val	Met	Glu	Gln
			260					265					270		
Phe	Gly	Glu	Gly	Phe	Asp	Met	Asn	Ile	Ile	Arg	Val	Asn	Ala	Gln	Glu
		275					280					285			
Arg	Phe	Met	Ser	Lys	Leu	Lys	Gly	Val	Ser	Asp	Pro	Glu	Arg	Lys	Arg
						295					300				
Lys	Ile	Ile	Gly	Asn	Glu	Phe	Val	Tyr	Val	Phe	Asp	Asp	Glu	Ala	Ala
305				310						315					320
Lys	Leu	Thr	Asp	Val	Asp	Phe	Leu	Ala	Gln	Gly	Thr	Leu	Tyr	Thr	Asp
				325					330					335	
Val	Ile	Glu	Ser	Gly	Thr	Lys	Thr	Ala	Gln	Thr	Ile	Lys	Ser	His	His
			340					345					350		
Asn	Val	Gly	Gly	Leu	Pro	Glu	Asp	Met	Glu	Phe	Glu	Leu	Ile	Glu	Pro
		355					360					365			
Ile	Asn	Thr	Leu	Phe	Lys	Asp	Glu	Val	Arg	Ala	Leu	Gly	Ile	Glu	Leu
		370				375						380			
Gly	Ile	Pro	Glu	His	Leu	Val	Trp	Arg	Gln	Pro	Phe	Pro	Gly	Pro	Gly
385					390					395					400
Leu	Gly	Ile	Arg	Val	Leu	Gly	Glu	Ile	Thr	Glu	Asp	Lys	Leu	Glu	Ile
				405					410					415	
Val	Arg	Glu	Ser	Asp	Ala	Ile	Leu	Arg	Glu	Val	Ile	Arg	Glu	Glu	Gly
			420					425					430		

Leu Glu Arg Asp Ile Trp Gln Tyr Phe Thr Val Leu Pro Gly Ile Gln
 435 440 445
 Ser Val Gly Val Met Gly Asp Tyr Arg Thr Tyr Asp His Thr Val Gly
 450 455 460
 Ile Arg Ala Val Thr Ser Ile Asp Gly Met Thr Ser Asp Phe Ala Arg
 465 470 475 480
 Ile Asp Trp Glu Val Leu Gln Lys Ile Ser Ser Arg Ile Val Asn Glu
 485 490 495
 Val Asp His Val Asn Arg Val Val Tyr Asp Ile Thr Ser Lys Pro Pro
 500 505 510
 Ser Thr Ile Glu Trp Glu
 515

<210> 6966

<211> 199

<212> PRT

<213> S.epidermidis

<400> 6966

Phe Gln Ile Ile Ile Lys Glu Phe Lys Ala Met Asn Val Ser Asn Gln
 1 5 10 15
 Ile Lys Lys Phe Arg Glu Arg Asp Gly Tyr Ser Gln Glu Phe Leu Ala
 20 25 30
 Glu Lys Met Phe Val Ser Arg Gln Thr Ile Ser Asn Trp Glu Asn Asp
 35 40 45
 Lys Ser Tyr Pro Asp Ile His Asn Leu Leu Ile Met Cys Gln Leu Phe
 50 55 60
 Lys Val Ser Leu Asp Glu Leu Val Glu Asp Asp Leu Lys Asn Val Gln
 65 70 75 80
 Ile Lys Asn Ile Lys Lys Glu Leu Asp Phe Trp Thr Trp Met Met Ile
 85 90 95
 Ile Thr Met Val Leu Gly Ser Val Leu Ile Gly Pro Met Ile His Tyr
 100 105 110
 Phe His Trp Leu Gly Ile Gly Ile Thr Tyr Leu Val Phe Leu Ile Gly
 115 120 125
 Ile Ile Ala Ser Thr Lys Leu Glu Lys Ile Lys Ile Lys Asn Asp Ile
 130 135 140
 Glu Thr Tyr Asp Arg Ile Leu Ala Phe Ile Asn Gly Lys Asp Pro Lys
 145 150 155 160
 Glu Val Gln Lys Ser Lys Phe Arg Asp Ile Trp Thr Ser Ser Ile Ser
 165 170 175
 Phe Ile Phe Phe Val Gly Val Ile Ile Gly Ile Ser Tyr Leu Ser Ile
 180 185 190
 Ile Leu Thr Asp Tyr Phe Leu
 195

<210> 6967

<211> 178

<212> PRT

<213> S.epidermidis

<400> 6967

Cys Phe Tyr Ile Lys Ile Lys Ile Lys Glu Val Asn Leu Met Tyr Asn
 1 5 10 15
 Lys Val Phe Ala Ile Leu Ile Ile Ile Phe Ser Ile Ile Ile Ile Ala
 20 25 30

Ser Asn Asp Thr Phe Ala Glu Ser Lys Asn Asp Met Met Asn Met Lys
 35 40 45
 Glu Asp Lys Lys Ser Thr Met Asp Met Thr Asn Met Lys His His Asp
 50 55 60
 Glu Arg Lys Lys Leu Asn Ser Ser Gln Gly Lys Asn Glu Ile Ile Phe
 65 70 75 80
 Pro Glu Val Ala Glu Ser Lys Lys Asp Asn Asn Gly Tyr Lys Asn Tyr
 85 90 95
 Thr Leu Lys Ala Gln Lys Gly Lys Thr Glu Phe Tyr Lys Asn Asn Phe
 100 105 110
 Ser Asn Thr Leu Gly Tyr Asn Gly Asn Leu Leu Gly Pro Thr Leu Lys
 115 120 125
 Leu Lys Lys Gly Asp Lys Val Lys Ile Lys Leu Ile Asn Asn Leu Asp
 130 135 140
 Glu Asn Thr Thr Phe His Trp His Gly Leu Glu Val Asn Gly Lys Val
 145 150 155 160
 Asp Gly Gly Pro Ser His Val Ile Lys Pro Gly Lys Glu Lys Asn Tyr
 165 170 175
 Lys Ile

<210> 6968
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6968
 Lys Gly Val Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn Lys
 1 5 10 15
 Asp Val Ile Thr Val Ala Val Gly Tyr Leu Arg Tyr Ala Leu Ser
 20 25 30
 Tyr Arg Asp Met Ser Glu Thr Leu Arg Glu Arg Gly Val Asn Val His
 35 40 45
 His Leu Thr Val
 50

<210> 6969
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 6969
 Leu Leu His Ile Ile Leu Ser Ala Leu Tyr His His Lys Asn Arg Lys
 1 5 10 15
 Asn Lys Ile Pro Lys Glu Tyr Arg Asn Leu Val Ser Asp Cys Gly Gln
 20 25 30
 Thr Asp Phe Leu Ser Val Ser Leu Phe Arg Lys Phe Tyr Leu Asn Tyr
 35 40 45
 Ser Phe Tyr Phe Tyr
 50

<210> 6970
 <211> 347
 <212> PRT
 <213> S.epidermidis

<400> 6970

Lys Asn Asn Met Asn Lys Ile Leu Ile Glu Lys Glu Ile Phe Lys Met
 1 5 10 15
 Lys Asn Leu Arg Asn Arg Asn Phe Leu Thr Leu Leu Asp Phe Thr Gln
 20 25 30
 Lys Glu Met Glu Phe Leu Leu Asn Leu Ser Glu Asp Leu Lys Arg Ala
 35 40 45
 Lys Tyr Ala Gly Ile Glu Gln Gln Lys Met Lys Gly Lys Asn Ile Ala
 50 55 60
 Leu Leu Phe Glu Lys Asp Ser Thr Arg Thr Arg Cys Ala Phe Glu Thr
 65 70 75 80
 Ala Ala Tyr Asp Gln Gly Ala His Val Thr Tyr Leu Gly Pro Thr Gly
 85 90 95
 Ser Gln Met Gly Lys Lys Glu Ser Thr Lys Asp Thr Ala Arg Val Leu
 100 105 110
 Gly Gly Met Tyr Asp Gly Ile Glu Tyr Arg Gly Phe Ser Gln Arg Val
 115 120 125
 Val Glu Asp Leu Ala Lys Tyr Ser Gly Val Pro Val Trp Asn Gly Leu
 130 135 140
 Thr Asp Glu Asp His Pro Thr Gln Val Leu Ala Asp Phe Leu Thr Ala
 145 150 155 160
 Lys Glu Val Leu Lys Lys Pro Tyr Asn Glu Ile Asn Phe Thr Tyr Val
 165 170 175
 Gly Asp Gly Arg Asn Asn Val Ala Asn Ala Leu Met Gln Gly Ala Ala
 180 185 190
 Ile Met Gly Met Thr Phe His Leu Val Cys Pro Lys Glu Leu Asn Pro
 195 200 205
 Thr Asp Glu Leu Leu Asn Arg Cys Asn Asp Ile Ala Asp Lys Asn Gly
 210 215 220
 Gly Glu Ile Leu Ile Thr Asp Asp Ile Asp Glu Gly Val Lys Gly Ser
 225 230 235 240
 Asp Val Ile Tyr Thr Asp Val Trp Val Ser Met Gly Glu Pro Asp Glu
 245 250 255
 Val Trp Glu Lys Arg Ile Lys Leu Leu Glu Pro Tyr Arg Val Thr Lys
 260 265 270
 Glu Leu Met Lys Lys Thr Gly Asn Pro His Thr Ile Phe Glu His Cys
 275 280 285
 Leu Pro Ser Phe His Asp Thr Glu Thr Ile Ile Gly Lys Gln Ile Gln
 290 295 300
 Glu Lys Tyr Gly Leu Thr Glu Met Glu Val Thr Asn Glu Val Phe Glu
 305 310 315 320
 Ser Glu Gln Ser Val Val Phe Gln Glu Ala Glu Asn Arg Ala His Thr
 325 330 335
 Ile Lys Ala Val Met Val Ala Thr Leu Gly Glu
 340 345

<210> 6971

<211> 308

<212> PRT

<213> S.epidermidis

<400> 6971

Tyr Trp Val Leu Phe Leu Gln Tyr Leu Ala Ile Asn Lys Thr Lys Val
 1 5 10 15
 Leu Val Lys Asn Met Asn Leu Asn Asp Leu Glu Ala Phe Tyr Lys Val
 20 25 30

Cys Glu Asn Arg Ser Phe Thr Lys Ala Ala Gln Glu Leu Asn Tyr Val
 35 40 45
 Gln Ser Asn Val Thr Ala Lys Ile Gln Arg Leu Glu Ser Tyr Tyr Gln
 50 55 60
 Val Lys Leu Leu Tyr Arg Asp Lys Lys Gly Ile Lys Pro Thr Pro Glu
 65 70 75 80
 Gly Ile Glu Leu Leu Lys Tyr Ile Lys Arg Ile Phe Thr Ile Leu His
 85 90 95
 Glu Ala Glu His Asn Val Ser Asn Asn Lys Lys Leu Asn Ile Asn Ile
 100 105 110
 Gly Thr Ile Glu Thr Ile Ala Ala Val His Leu Pro Lys Leu Leu Asn
 115 120 125
 Glu Tyr Lys Arg Lys Asn Pro Lys Ile Gln Ile Asn Leu Lys Thr Asp
 130 135 140
 Asn Ser Ile Lys Leu Ile Glu His Val Lys Asn Arg Glu Met Asp Cys
 145 150 155 160
 Ala Phe Ile Ser Gly Asn Ile Asn Asp Lys Asp Leu Ile Cys Thr Asn
 165 170 175
 Ile Phe Asn Glu Lys Leu Val Ile Leu Ser Gln Lys Ser Asn Phe Lys
 180 185 190
 Gln Asn Ile Asn Glu Asn Lys Ser Ile Ile Met Phe Gly Glu Gly Cys
 195 200 205
 Phe Tyr Arg Lys Ile Phe Glu Asp Trp Leu Asn Tyr His Asp Ile Asn
 210 215 220
 Ile Glu Asn Lys Met Thr Leu Asn Thr Leu Asp Gly Ile Leu Gly Cys
 225 230 235 240
 Val Glu Ala Gly Leu Gly Ile Ala Phe Leu Pro Met Ser Val Leu Asn
 245 250 255
 Lys Gly Asn Ser Asp Gly Ile Glu Ile Thr Lys Val Glu Glu Ser Phe
 260 265 270
 Gln Thr Ile Ser Leu Asn Ile Ile Tyr Arg Gln Asp Asn Lys Asn Asn
 275 280 285
 Asn Val Ile Asn Gln Leu Lys Gln Val Ala Phe Glu Lys Met Lys Ser
 290 295 300
 Asn Ile Ile Lys
 305

<210> 6972

<211> 107

<212> PRT

<213> S.epidermidis

<400> 6972

Ile Thr Leu Ile Ile Met Lys Gly Met Gly Ile Met Ser Asn Ile Ile
 1 5 10 15
 Lys Thr Ile Gly Lys Gly Ile Gly Lys Gly Val Gly Ala Ala Tyr
 20 25 30
 Tyr Ser Val Ala Thr Val Gly Ala Ala Ile Gly Ala Ile Trp Glu Thr
 35 40 45
 Thr Gly Asp Arg Gly Leu Met Arg Asp Ala Leu Ser Asp Ser Ser Asn
 50 55 60
 Gln Asp Leu Ile Glu Ile Tyr Glu Ile Gln Lys Lys Asp Asp Gly Asp
 65 70 75 80
 Tyr Asp Thr Tyr Ile Ala Ala Lys Ser Leu Leu Gln Glu Arg Gly Phe
 85 90 95
 Thr Tyr Asn His Glu Thr Asn Lys Trp Glu Lys

100

105

<210> 6973
 <211> 182
 <212> PRT
 <213> S.epidermidis

<400> 6973

Lys	Val	Leu	Ile	Met	Asn	Leu	Thr	Thr	Gln	Ile	Thr	Lys	Met	Leu	Gly
1				5					10					15	
Ile	Lys	Tyr	Pro	Ile	Ile	Gln	Ala	Gly	Met	Ala	Gly	Ser	Thr	Thr	Pro
			20					25					30		
Glu	Leu	Val	Ser	Thr	Val	Ser	Lys	Gln	Gly	Gly	Leu	Gly	Met	Ile	Gly
		35					40					45			
Ala	Gly	Tyr	Phe	Asp	Ser	His	Gln	Leu	Ser	Lys	Glu	Ile	Leu	Glu	Val
	50					55					60				
Gln	Lys	Leu	Thr	Gln	Ala	Pro	Phe	Ala	Val	Asn	Leu	Phe	Thr	Pro	Asn
65				70						75					80
Asp	Ile	Lys	Tyr	Asp	Lys	Lys	Gln	Ile	Glu	Gln	Met	Asn	Thr	Lys	Leu
				85					90					95	
Lys	Pro	Tyr	Arg	Glu	Ala	Leu	Gly	Leu	Ser	Thr	Pro	Lys	Asn	Ser	Thr
			100					105					110		
Val	Lys	Glu	Lys	Glu	Lys	Phe	Glu	Asp	Ala	Ile	Glu	Val	Ile	Glu	Ser
		115					120					125			
Leu	Lys	Val	Pro	Ile	Ile	Ala	Phe	Thr	Phe	Gly	Ile	Pro	Asn	Gln	Asn
		130				135					140				
Ile	Ile	Lys	Arg	Leu	His	Asn	Ala	Gly	Lys	Ile	Leu	Ile	Gly	Thr	Ala
145					150					155					160
Thr	Ser	Val	Glu	Glu	Ala	Val	Glu	Asn	Gly	Lys	Cys	Trp	Tyr	Gly	Tyr
				165					170					175	
Ser	Cys	Ser	Pro	Gly	Leu										
			180												

<210> 6974
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 6974

Lys	Lys	Leu	Ile	Asn	Cys	Ser	Thr	Phe	Ile	Cys	Lys	Ala	Ser	Val	Cys
1				5					10					15	
Val	Thr	Leu	Asp	Tyr	Gly	Ser	Ser	Lys	Ser	Pro	Thr	Leu	Leu	Asn	Leu
			20					25					30		
Phe	Ile	Lys	His	Phe	Cys	Asn	Phe	Lys	His	Met	Leu				
		35					40								

<210> 6975
 <211> 77
 <212> PRT
 <213> S.epidermidis

<400> 6975

Glu	Val	Ile	Met	Met	Thr	Leu	Glu	Gln	Gln	Leu	Lys	His	Tyr	Ile	Thr
1				5					10					15	
Asn	Leu	Phe	Asn	Leu	Pro	Lys	Asp	Glu	Lys	Trp	Glu	Cys	Glu	Ser	Ile
			20					25					30		

Glu Glu Ala Ala Asp Asp Ile Leu Pro Glu Gln His Val Arg Leu Gly
 35 40 45
 Pro Leu Ser Asn Lys Ile Leu Gln Thr Asn Thr Tyr Tyr Ser Tyr Thr
 50 55 60
 Leu His Lys Ser Asn Ile Tyr Pro Phe Ile Leu Tyr Tyr
 65 70 75

<210> 6976

<211> 224

<212> PRT

<213> S.epidermidis

<400> 6976

Tyr Val Ile Met Asn Cys Lys Thr Thr Ser Arg Arg Phe Leu Met Asp
 1 5 10 15
 Gly Leu Ile Thr Phe Ile Ile Ile Thr Leu Leu Ile Ile Ile Val Pro
 20 25 30
 Gly Pro Asp Phe Ile Ile Val Met Lys Asn Thr Ile Asn Ser Ser Lys
 35 40 45
 Met Asn Gly Phe Met Ala Ala Phe Gly Ile Thr Thr Gly His Ile Leu
 50 55 60
 Tyr Ser Ser Leu Ala Ile Phe Gly Ile Ile Tyr Ile Leu Thr Ser Leu
 65 70 75 80
 His Phe Val Phe Leu Thr Ile Lys Ile Leu Gly Ala Cys Tyr Leu Ile
 85 90 95
 Tyr Leu Gly Ile Lys Ser Ile Leu Ser Ala His Ser Ser Val Asp Phe
 100 105 110
 Ser Lys Gln Ala Leu Ala Asp Val Arg Asn Val Ser Tyr Ile Thr Ser
 115 120 125
 Phe Arg Gln Gly Phe Leu Ser Thr Ser Leu Asn Pro Lys Ala Leu Leu
 130 135 140
 Phe Tyr Val Ser Ile Phe Pro Gln Phe Leu Ser Asn Gly Asn Ile His
 145 150 155 160
 Met Lys Ser Glu Val Ala Leu Phe Ala Phe Ser Val Val Val Val Ile
 165 170 175
 Cys Leu Trp Phe Leu Phe Cys Val Phe Ile Phe Gln Tyr Ile Lys Leu
 180 185 190
 Leu Phe Ser Arg Pro Arg Phe Lys Ala Ile Phe Asp Tyr Ile Val Gly
 195 200 205
 Phe Val Leu Ile Gly Leu Ser Ile Asn Leu Leu Leu Ser Lys Ser Ser
 210 215 220

<210> 6977

<211> 157

<212> PRT

<213> S.epidermidis

<400> 6977

Ser Lys Ile Ile Lys Gly Val Ile Lys Met Lys Lys Glu Lys Arg Leu
 1 5 10 15
 Asn Leu Ile Leu Thr Val Ile Gln Gln Asn Gln Phe Asn Lys Lys Gln
 20 25 30
 Gln Ile Val Asp Tyr Met Ala Arg His Phe Gly Val Tyr Tyr Ser Leu
 35 40 45
 Thr Thr Ile Ser Arg Asp Leu Gln Glu Leu Glu Ile Tyr Lys Ile Pro
 50 55 60

Val Glu Asn Lys Lys Tyr Ile Tyr Lys Lys Ile Asn Gln Thr Asn Gln
 65 70 75 80
 Leu Ser Ala Lys Lys Gln Leu Glu Ile Phe Ser Asp Glu Ile Ile Glu
 85 90 95
 Phe Ile Thr Leu Asn Asn Tyr Val Leu Ile Lys Thr Ser Pro Gly Phe
 100 105 110
 Ala Gln Ser Ile Ser Tyr Tyr Ile Asp Gln Leu Gln Met Lys Glu Ile
 115 120 125
 Leu Gly Ile Ile Gly Gly Asn Asp Thr Leu Met Ile Leu Thr Ser Ser
 130 135 140
 Asn Glu Ile Ala Glu Phe Val Cys Tyr Gln Leu Phe Pro
 145 150 155

<210> 6978
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 6978
 Ala Tyr Ser Ile Leu Tyr Phe Phe Phe Ile Asn Ser Tyr Phe Thr Asn
 1 5 10 15
 Leu Asn Leu Leu Gln Phe Ile Phe Glu Thr Tyr Ile Thr Glu Asn Leu
 20 25 30
 Val Leu Asn Ala Leu Pro Pro Thr Leu Ser
 35 40

<210> 6979
 <211> 57
 <212> PRT
 <213> S.epidermidis

<400> 6979
 Val Tyr Ser Met Phe Lys Val Ile Tyr His Leu Lys Phe Ser Asn Tyr
 1 5 10 15
 Leu Ser Ile Phe Arg Ser Ile Asp Asn Thr Leu Val Tyr Pro Ala Ile
 20 25 30
 Met Ser Phe Tyr Leu Thr Lys Ser Lys Pro Pro Val Gln Thr Asp Gly
 35 40 45
 Leu Leu Cys Ile Tyr Asn Phe Phe Tyr
 50 55

<210> 6980
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 6980
 Asn Asn Val Leu Ile Lys Arg Ser Asn Leu Asn Tyr His Met Thr Ile
 1 5 10 15
 His Ser Asn Gln Gly Tyr His Tyr Gln His Lys Ser Tyr Ile Asn Ile
 20 25 30
 Leu Lys Glu Asn Ser Ala Phe Gln Ser Met Thr Arg Asn Ala Asn Cys
 35 40 45
 Leu Asp Asn Tyr
 50

<210> 6981
 <211> 154
 <212> PRT
 <213> S.epidermidis

<400> 6981

```

Leu Pro Gln Ile Val Asp Asp Val Ser Ile Pro Val Ile Ala Ala Gly
1      5      ..      10      15
Gly Ile Met Asp Gly Arg Gly Leu Val Ala Ser Leu Ala Leu Gly Ala
      20      25      30
Gly Ala Ala Gln Leu Gly Thr Ala Tyr Leu Thr Thr Asn Glu Ser Gly
      35      40      45
Ala Asp Asp Lys Ile Lys Asn Glu Ile Ile Glu Ser Ser Glu Thr Asp
      50      55      60
Thr Ile Leu Thr Asn Val Phe Ser Gly Lys Leu Ala Arg Gly Ile Met
65      70      75      80
Asn Glu Phe Val His Asn Met Asn Leu Tyr Ser Lys Gln Val Pro Pro
      85      90      95
Tyr Pro Leu Gln Asn Gln Leu Thr Thr Gln Ile Arg Lys Ser Ala Leu
      100     105     110
Glu Lys Gly Tyr Thr Glu Trp Thr His Ile Trp Ser Gly Gln Ser Thr
      115     120     125
Arg Leu Ala Asp Thr Val Asp Ala Ala Gln Leu Thr Lys Asn Ile Ile
      130     135     140
Asn Asp Ala Val Lys Ile Ile Asn Asn Lys
145      150

```

<210> 6982
 <211> 912
 <212> PRT
 <213> S.epidermidis

<400> 6982

```

Gly Glu Gln Met Lys Asn Ile Asp Ile Ala Ile Tyr Asp Ile Asp Lys
1      5      10      15
Val Ile Cys Lys Ser Ile Glu Asn Asn Ser Ser Asp Leu Gly Tyr Leu
      20      25      30
Ser Gln Ser Ile Leu Ser His Leu Arg Asn Tyr Val Glu His Ile Gly
      35      40      45
Met Lys Tyr Tyr Phe Glu Ser Val Asn Glu Asp Met Thr Asn Ser Ser
      50      55      60
Ser Asn Ile Tyr Asn Glu Ile Gln Met Gly Ile Gly Tyr Phe Arg Lys
65      70      75      80
His Tyr Lys Leu Asn Trp Leu Lys Asn Phe His Glu Leu Leu Gln Gln
      85      90      95
Ser Val Ser His Tyr Thr Phe Asp Glu Asp Arg Ser Glu Arg Leu Phe
      100     105     110
Ile Lys Tyr Tyr Asp Leu Met Leu Glu Leu Lys Glu Lys Leu Lys Lys
      115     120     125
Asp Phe Glu Met Asp Leu Leu Gln Asn Leu Tyr Lys Val Pro Leu Asn
      130     135     140
Ile Asp Ser Asp Leu Lys Gly Tyr Tyr His Thr Ile Ser Gln Leu Ile
145      150     155     160
Gly Asn Lys Tyr Thr Asp Asn Glu Tyr Glu Val Asp Asn Ser Arg Tyr
      165     170     175
Tyr Ile Glu Lys Thr Lys Pro Phe Val Ile Glu Asn Lys Val Tyr Tyr

```



```

625          630          635          640
Val Leu Ser Lys Asn Ile Ile Asn Glu Leu Thr Asp Met Tyr Arg Thr
          645          650          655
Lys Asn Asp Asp Leu Leu Tyr Phe Trp Lys Ser Val Arg Glu Lys Lys
          660          665          670
Ser Asn Leu Asn Glu Ile Ile Asn Met Asn Lys Tyr Ser Thr Arg Leu
          675          680          685
Asp Glu Ser Ile Phe Asn Glu Phe Asn Lys Asp Glu Ile Ile Leu Cys
          690          695          700
Leu Asn Tyr Asp Gly Ile Tyr Gly Ile Asn Asn Ile Asn Arg Leu Leu
705          710          715          720
Gln Ala Asn Asn Lys Asn Asp Ser Val Ile Trp Gly Val Lys Glu Tyr
          725          730          735
Lys Val Gly Asp Pro Ile Leu Phe Asn Glu Thr Asn Lys Tyr Ser Pro
          740          745          750
Ile Leu Phe Asn Asn Leu Lys Gly Ser Ile Ile Glu Ile His Val Phe
          755          760          765
Glu Glu Tyr Ile Leu Phe Asp Leu Glu Ile Asn Lys Val Ile Asn Glu
          770          775          780
Leu Asp Ile Ile Ser Leu Glu Ile Asp Leu Ile Ser Ser Ser Glu Asn
785          790          795          800
Ser Ser Val Ile Arg Ile Arg Val Glu Lys Ser Asp Gly Leu Asn Asp
          805          810          815
Asp Asp Asn Asp Ser Ser Asp Ser Ile Val Pro Phe Gln Val Ser Tyr
          820          825          830
Ala Ile Ser Ile His Lys Ala Gln Gly Leu Glu Phe Asn Ser Val Lys
          835          840          845
Ile Val Ile Ser Asp Asp Leu Asp Glu Gln Ile Thr Asn Asn Ile Phe
          850          855          860
Tyr Thr Ala Ile Thr Arg Ala Arg Glu Asn Leu Lys Ile Tyr Trp Ser
865          870          875          880
Pro Arg Thr Glu Lys Lys Ile Ile Asp Asn Ile Ile Ser Lys Arg Asn
          885          890          895
Leu Lys Asp Leu Ser Ile Leu Lys Ser Arg Ile Lys Lys Gln Asn Thr
          900          905          910

```

```

<210> 6983
<211> 59
<212> PRT
<213> S.epidermidis

```

```

<400> 6983
Phe Asn Glu Ile His Ile Phe Ile Pro Tyr Phe His Leu Leu Phe Asn
1          5          10          15
Arg Asn Pro Arg Ser Leu Ile Gln Tyr Lys Ile Lys Ile Lys Lys Leu
          20          25          30
Leu Met Phe Leu Lys Met Arg Ser Asp Leu Trp Ile Thr Arg Lys Val
          35          40          45
Lys Asn Lys Lys Val Val Ile Ala Met Phe Lys
          50          55

```

```

<210> 6984
<211> 607
<212> PRT
<213> S.epidermidis

```

<400> 6984

Gln	Gln	Pro	Phe	Glu	Arg	Arg	Cys	Ser	Leu	Met	Thr	Gln	Thr	Asn	Pro
1				5					10					15	
Ser	Phe	Asn	Pro	Ser	Pro	Arg	Tyr	Lys	Ser	Lys	Lys	Gly	Trp	Tyr	Lys
		20						25					30		
Asp	Lys	Pro	Pro	Lys	Glu	Lys	Gly	Gly	Met	Pro	Thr	Glu	Val	Glu	Ile
		35					40					45			
Ala	Gly	Pro	Ile	Val	Ile	Glu	Asn	Lys	Phe	Ile	Asp	Pro	Lys	Thr	Asn
	50					55					60				
Thr	Glu	Lys	Val	Ile	Ile	Thr	Asp	Glu	Asp	Gln	Lys	Val	Ile	Val	Glu
65					70					75					80
Ser	Ser	Asp	Ile	Leu	Thr	Thr	Gln	Lys	Leu	Pro	Ser	Leu	Met	Lys	Tyr
			85						90					95	
Gly	Phe	Ser	Ile	Asn	Glu	Lys	Tyr	Thr	Lys	Asp	Leu	Gly	Tyr	Ala	Leu
			100					105					110		
Gln	Gln	Met	Arg	Asn	Gln	Leu	Pro	Ile	Ser	Tyr	Leu	Tyr	Glu	Gly	Val
		115					120					125			
Gly	Ile	Leu	Glu	Thr	Pro	Phe	Gly	Pro	Ile	Val	Ser	Leu	Asn	Glu	Ile
	130					135					140				
Tyr	Thr	Thr	Thr	Glu	Phe	Asp	Asn	Lys	Ser	Pro	Ser	Asp	Ala	Ile	Cys
145					150					155					160
Glu	Asn	Thr	Tyr	Asp	Leu	Ala	Pro	Arg	Gly	Thr	Phe	Asp	Asn	Trp	Phe
				165					170					175	
Asn	Met	Tyr	Ile	Asp	Glu	Val	Lys	Asp	His	Leu	Leu	Leu	Glu	Leu	Thr
			180					185					190		
Val	Ile	Phe	Gly	Ile	Ser	Ala	Leu	Val	Thr	Ser	Phe	Leu	Lys	His	Lys
		195					200					205			
His	Glu	Ile	Glu	Phe	Ala	Gly	Ile	Leu	Phe	Ser	Phe	Thr	Gly	Gln	Ser
	210					215					220				
Ser	Thr	Gly	Lys	Ser	Thr	Ala	Ala	Ala	Leu	Ala	Val	Ser	Val	Ala	Gly
225					230					235					240
Asn	Pro	Thr	Lys	Gly	Asn	Glu	Thr	Leu	Phe	Arg	Ser	Trp	Asn	Ala	Thr
				245					250					255	
Arg	Asn	Ala	Leu	Glu	Gly	Tyr	Leu	Ser	Asn	Asn	Tyr	Gly	Val	Pro	Ile
		260						265					270		
Val	Phe	Asp	Glu	Leu	Ser	Ser	Thr	Thr	Leu	Lys	Asp	Thr	Thr	Gly	Leu
		275					280					285			
Leu	Tyr	Ser	Ile	Ala	Glu	Gly	Gln	Gly	Arg	Gln	Arg	Ser	Asn	Val	His
	290					295				300					
Gly	Glu	Val	Lys	Ala	Pro	Lys	Asn	Trp	Gly	Thr	Ser	Val	Ile	Ser	Thr
305					310					315					320
Ser	Glu	Tyr	Ser	Ile	Phe	Asn	Asp	Ser	Ala	Gln	Asn	Asp	Gly	Leu	Arg
				325					330					335	
Val	Arg	Thr	Ile	Glu	Ile	Asn	Glu	Gln	Phe	Thr	Thr	Asn	Ala	Thr	Asn
		340						345					350		
Ala	Asp	Asn	Ile	Lys	Lys	Ala	Val	Ala	Leu	Asn	Tyr	Gly	His	Val	Leu
		355					360					365			
Pro	Leu	Val	Ala	Lys	Tyr	Leu	Ile	Asn	Arg	Glu	Asp	Glu	Val	Ile	Gln
	370					375					380				
Trp	Phe	Tyr	Lys	Glu	Val	Asp	Trp	Phe	Glu	Ala	Lys	Leu	Lys	Asp	Glu
385					390					395					400
Thr	Asn	Asn	Thr	Gly	Ile	Arg	Met	Phe	Lys	Arg	Tyr	Ala	Val	Ile	Thr
				405					410					415	
Thr	Ser	Ala	Lys	Ile	Leu	Gly	Arg	Val	Leu	Ser	Thr	Asp	Ile	Asp	Ile
			420					425					430		
Ala	Asn	Ile	Arg	Asp	Tyr	Phe	Ile	Asp	Tyr	His	Thr	His	Thr	Val	Ser

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

435	440	445
Glu Arg Ser Leu Ala Asp Lys Ala Ile Asp Val Ile Ile Gln Phe Val		
450	455	460
Ala Gln Asn Arg Gly Lys Phe Ser Asp Glu Gly Ala Leu Lys Asn Met		
465	470	475
Phe Glu Asn Tyr Gly Leu Ile Ser Leu Lys Asp Asp His Ile Glu Val		
485	490	495
Lys Ile Ile Ala Asn Val Phe Lys Gln Met Leu Asn Asn His Gln Phe		
500	505	510
Gln Asp Val Asn Asn Val Val Asn Ala Leu Arg Asp Lys Gly Phe Ile		
515	520	525
Leu Ala Asp Arg Gly Arg Gln Thr Thr Lys Arg Ser Val Lys Asp Asn		
530	535	540
Ser Gly Lys Lys Gln Ser Leu Val Phe Tyr His Leu Lys Leu Asp Val		
545	550	555
Glu Phe Ala Ser Ile Leu Gly Leu Thr Lys Asp Lys Ser Leu Leu Gln		
565	570	575
Asn Trp Thr Pro Ser Asn Asp Asn Lys Ala Ala Lys Glu Leu Phe Lys		
580	585	590
Ser Ala Asn Glu Gly Ile Gly Pro Ser Gly Val His Glu Asp Phe		
595	600	605

<210> 6985

<211> 199

<212> PRT

<213> S.epidermidis

<400> 6985

Gly Asp Arg Met Glu Ile Tyr Leu Val Arg His Gly Glu Ser Gln Ser	
1	5
Asn Tyr Asp Asn Lys His Gly Tyr Leu Tyr Phe Cys Gly Gln Leu Asp	
20	25
Val Pro Leu Thr Glu Arg Gly Ile Lys Ser Ala Lys Glu Leu Ser Val	
35	40
Tyr Phe Lys Asn Lys Tyr Ile Asp Asn Val Tyr Val Ser Asp Leu Lys	
50	55
Arg Thr Arg Gln Thr Tyr Glu Glu Leu Phe Pro Tyr Asp Ile Pro Thr	
65	70
Ile Tyr Thr Lys Thr Leu Arg Glu Arg Ser Leu Gly Val Phe Glu Gly	
85	90
Lys Asn Lys Glu Glu Val Cys Lys Asp Lys Arg Phe Glu Lys Tyr Phe	
100	105
Arg Asp Pro Asn Tyr Lys Tyr Phe Arg His Ser Phe Ser Gln Lys Ala	
115	120
Pro Gln Gly Glu Ser Tyr Gln Asp Val Tyr Asp Arg Val Val Thr Phe	
130	135
Ile Glu Asn Glu Leu Asn Gln Gln Arg Arg Val Val Ile Val Ala	
145	150
His Gln Val Val Ile Arg Cys Phe Phe Val Tyr Phe Lys Met Ile Thr	
165	170
Lys Glu Lys Ala Leu Thr Thr Glu Ile His Asn Cys Tyr Pro Tyr Leu	
180	185
Ile Lys Glu Glu Met Lys Phe	
195	

<210> 6986

<211> 274
 <212> PRT
 <213> S.epidermidis

<400> 6986

Leu Gly Gly Ile Met Lys Asn Phe Lys Val Gln Glu Ala Lys Glu Thr
 1 5 10 15
 Pro Leu Ser Ala Gln Asn Ala Asn Val Phe Ile Lys Cys Val Lys Lys
 20 25 30
 Tyr Asn Trp Leu Lys Asp Ile Ile Asn Gly Tyr Phe Gln Tyr Arg
 35 40 45
 Tyr Val Thr Glu Glu Val Glu Tyr Leu Asn Ile Glu Thr Thr Asp Leu
 50 55 60
 Ser Gly Lys Arg Ile Pro Ile Glu Asp Ile Thr Phe Pro Met Leu Cys
 65 70 75 80
 Phe Cys Asp Ile Pro Leu Asn Gln Leu Lys Asp His Asn Lys Trp Tyr
 85 90 95
 Gly Asp Tyr Ala Ile Cys Met Lys Lys Ser Trp Gly Val Asn Lys Asn
 100 105 110
 Leu Gln Pro Leu His Tyr Val Ser Asn Thr Ser Glu Tyr Ile Lys Met
 115 120 125
 Tyr Gln Glu Val Phe Asn Asn Ile Val Asn Lys Pro Asp Thr Asp Glu
 130 135 140
 Lys Val Tyr Glu Phe Ile Phe Ala Ser Leu Phe Phe Leu Lys His Phe
 145 150 155 160
 Lys Gly Ser Gln Tyr Cys Glu Lys Thr Asp Lys Ile Glu Glu Lys Ile
 165 170 175
 Phe Met Asp Glu Gln Glu Trp Arg Ser Ile Lys Leu Val Asp Glu Asp
 180 185 190
 Leu Asp Pro Phe Tyr Ile Asn Glu Asn Ser Asp Ser Lys Arg Asn Tyr
 195 200 205
 Tyr Asn Glu Ala Leu Thr Lys Leu Ser Ser Asn Lys Leu Glu Phe Asn
 210 215 220
 Cys Glu Asp Ile Arg Tyr Ile Ile Val Glu Lys Glu Glu Asp Val Ile
 225 230 235 240
 Gln Leu Ile Asn Asp Ile Asn Cys Ser Asn Tyr Asp Asp Gln Glu Lys
 245 250 255
 Ser Leu Leu Ile Ser Lys Ile Ser Val Leu Asn His Leu Arg Glu Asp
 260 265 270
 Phe Met

<210> 6987
 <211> 509
 <212> PRT
 <213> S.epidermidis

<400> 6987

Lys Arg Val Ile Ile Met Ile Lys Asn Lys Trp Lys Ile Glu Leu Trp
 1 5 10 15
 Phe Gln Phe Phe Ser Tyr Phe Ile His Lys Ile Asp Ser Glu Phe Ile
 20 25 30
 Leu Lys Glu Tyr Ala Gln His Ile Leu Pro Glu Glu Met Arg Thr Asn
 35 40 45
 Tyr Val Val Gly Glu Ala Gln Pro Asn Glu Thr Ile Tyr Ile Ser Tyr
 50 55 60

Phe	Val	Asn	Thr	Ser	Asn	Gln	Asn	Ile	Glu	Gln	His	Thr	Val	Lys	Cys
65					70					75					80
Ser	Glu	Glu	Gly	Ile	Phe	Ile	Asp	Lys	Ile	Pro	Ser	Gly	Phe	Thr	Lys
				85					90					95	
Asp	Asn	Leu	Thr	Tyr	Ser	Ile	Asp	Ser	Gln	Ser	Met	Val	Asp	Ile	Asp
			100					105					110		
Glu	Leu	Ser	Asn	Glu	Ile	Ile	Asp	Gln	Gly	Val	Asp	Ala	Leu	Asp	Val
		115					120					125			
Leu	Glu	Ser	Thr	Thr	Leu	Asp	Thr	Tyr	Phe	Thr	Glu	Phe	Leu	Thr	Thr
	130					135					140				
Ile	Asn	Lys	Thr	Thr	Asp	Phe	Ala	Lys	Lys	Ile	Ala	Asn	Asn	Thr	Ile
145					150					155					160
Lys	Gln	Ile	Arg	Glu	Asn	Ile	Glu	Leu	Lys	Lys	Ala	Asn	Tyr	Arg	Ile
				165					170					175	
Asp	Tyr	Glu	Lys	Ala	Ile	Asp	Asp	Val	Ser	Ser	Leu	Glu	Ser	Phe	Ile
			180					185					190		
Asn	Leu	Lys	Asp	Thr	Ile	Leu	Glu	Thr	His	Gln	Asp	Leu	Ser	Lys	Glu
		195					200					205			
Asn	Phe	Asp	Asp	Val	Leu	Ile	Ser	Asp	Phe	Leu	Thr	Lys	Tyr	Leu	Ile
	210					215					220				
Tyr	Lys	Glu	Lys	Gln	Asp	Ser	Tyr	Val	Lys	Lys	Asn	Ile	Ser	Asn	Leu
225					230					235					240
Asn	Lys	Ser	Asn	Tyr	Phe	Lys	Gln	Leu	Val	Thr	Glu	Gly	Leu	Ile	Lys
				245					250					255	
Glu	Arg	Thr	Ser	Asn	Ser	Gln	Tyr	Phe	Glu	Ile	Ala	Asn	Ser	Ile	Lys
			260					265					270		
Pro	Ser	Ile	His	Asn	Lys	Tyr	Ser	Leu	Asn	Gln	Ser	Asp	Glu	Leu	Asp
		275					280					285			
Gln	Phe	Arg	Gln	Ala	Val	Ile	Gly	Ile	Ser	Leu	Asn	Leu	Tyr	Asp	Gln
	290					295					300				
Asn	Asp	Thr	Tyr	Phe	Lys	Phe	Ile	Arg	Ser	Ile	Leu	Thr	Glu	Lys	Ser
305					310					315					320
Arg	Lys	Val	Asn	Leu	Thr	Ile	Asp	Gly	Leu	Ile	Glu	Ser	Gln	Asn	Thr
				325					330					335	
Ile	Asn	Glu	Phe	Met	Lys	Lys	Gln	Asp	Leu	Ile	Ser	Asp	Asn	Glu	Leu
			340					345					350		
Tyr	Tyr	Leu	Thr	Thr	Ile	Glu	Asp	Thr	Phe	His	Phe	Ala	Leu	Phe	Thr
		355					360					365			
Ala	Ile	Ser	Asp	Leu	Met	Asp	Glu	Leu	Val	Leu	Val	Thr	Ser	Lys	Ile
	370					375					380				
Ile	Gln	Ser	Ala	Thr	Gln	Tyr	Asp	Val	Leu	Val	Ala	Leu	Tyr	Ser	Ile
385					390					395					400
Ser	Asn	Leu	Lys	Asn	Asp	Leu	Asn	Lys	Leu	Ala	His	Lys	His	Glu	Arg
				405					410					415	
Ser	Leu	Thr	Arg	Phe	Lys	Ser	Leu	Ile	Asp	Gly	Tyr	Val	Arg	Asn	Thr
		420						425					430		
Arg	Leu	Lys	Asp	Leu	Ile	His	Asn	Ile	Ile	Met	Asn	Asp	Ile	Lys	Met
		435					440					445			
Thr	Glu	Lys	Val	Glu	Arg	Ser	Leu	Leu	Thr	Asp	Leu	Lys	Lys	Tyr	Asn
	450					455					460				
Ile	Ser	Asn	Phe	Tyr	Lys	Arg	Asp	Asn	Phe	Asn	Asn	Asn	Pro	Asn	Asp
465					470					475					480
Phe	Leu	Asp	Lys	Leu	Met	Ile	Gln	Ile	Ile	Ser	Lys	Phe	Tyr	Lys	Thr
				485					490					495	
Arg	Leu	Glu	Asp	Ile	Asn	Asp	Gly	Pro	Asn	Leu	Tyr	Tyr			
			500					505							

<210> 6988
 <211> 156
 <212> PRT
 <213> S.epidermidis

<400> 6988
 Glu Ile Thr Ile Glu Asn Ile Tyr Cys Thr His Cys Met Cys Asp Cys
 1 5 10 15
 Asp Asp Ala Ser Ser Lys Phe Asn Ser Thr Phe Ile Arg Ser Asn Phe
 20 25 30
 Asn Ser Arg Asn Cys Cys Cys Ile Val Arg Gly Gly Asp Gly Lys Met
 35 40 45
 Thr Thr Asp Leu His Thr Leu Val Leu Ile Val Leu Cys Gly Val Val
 50 55 60
 Thr Leu Leu Val Arg Val Ile Pro Phe Ile Met Ile Ser Arg Val Asn
 65 70 75 80
 Leu Pro Ala Ile Val Ile Lys Trp Leu Ser Phe Ile Pro Ile Thr Leu
 85 90 95
 Phe Thr Ala Leu Ile Ile Asp Gly Val Ile Gln Gln His Asp His Ala
 100 105 110
 Phe Gly Tyr Thr Leu Asn Leu Pro Tyr Ile Ile Ala Ile Val Pro Thr
 115 120 125
 Val Met Leu Ala Ile Phe Thr Arg Ser Leu Thr Val Thr Ile Leu Gly
 130 135 140
 Gly Ile Phe Val Ile Ala Cys Leu Arg Leu Ile Phe
 145 150 155

<210> 6989
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 6989
 Gly Val Lys Ile Lys Lys Tyr Ile Lys Glu Ile Leu Asp Lys Ile Tyr
 1 5 10 15
 Glu Asp Phe Met Asn Asn Asp Ala Ile Thr Thr Leu Leu Asn Asn Asp
 20 25 30
 Leu Gln Thr Ile Ile Asn Gln Tyr Leu Ser Lys
 35 40

<210> 6990
 <211> 113
 <212> PRT
 <213> S.epidermidis

<400> 6990
 Leu Glu Glu Ile Asp Ser Phe Asn Glu Leu Phe Tyr Leu Ile Glu Leu
 1 5 10 15
 Tyr Leu Lys Ala Phe Lys Gly Gln Lys Lys Thr Gly Tyr Glu Phe Glu
 20 25 30
 Glu Arg Leu Asn Thr Phe Ile Gln Ser Tyr Val Ile Ile Leu Leu Ile
 35 40 45
 Asp Ile Arg Leu Pro Thr Val Arg Leu Tyr Ile Ile Arg His Ile Val
 50 55 60
 Asp Thr Cys Glu Lys Glu Val Asp Asn Gln Lys Arg Ile Ile Leu Ile

65					70					75				80	
Glu	Lys	Ser	Ile	Lys	Lys	Tyr	Arg	Tyr	Val	Lys	Glu	Gln	Ile	Lys	Arg
				85					90					95	
Phe	Gly	Asn	Ala	Leu	Lys	Glu	Glu	Leu	Ser	Asn	Ala	Thr	Leu	Ser	Ile
			100					105					110		
Glu															

<210> 6991

<211> 470

<212> PRT

<213> S.epidermidis

<400> 6991

Arg	Pro	Trp	Ile	Thr	Ile	Glu	Lys	Lys	Met	Lys	Ile	Arg	Asp	Glu	Asn
1				5					10					15	
Met	Asn	Phe	Val	Lys	Ser	Lys	Thr	Asp	Leu	Phe	Arg	Leu	Ile	Asp	Asn
			20					25					30		
Glu	Ala	Gln	Thr	Ser	Thr	Ser	Lys	Val	Val	Leu	Phe	Leu	Ile	Leu	Gly
		35					40					45			
Thr	Ile	Phe	Leu	Asp	Ala	Tyr	Asp	Ile	Thr	Ile	Leu	Gly	Thr	Met	Thr
	50					55					60				
Asp	Gln	Leu	Thr	Gln	Gln	Phe	His	Leu	Ser	Pro	Ala	Thr	Leu	Ser	Ile
65					70				75					80	
Val	Met	Thr	Ser	Leu	Pro	Ile	Gly	Ala	Leu	Phe	Gly	Ala	Leu	Leu	Gly
			85					90					95		
Gly	Thr	Leu	Ala	Tyr	Gln	Phe	Gly	Arg	Lys	Arg	Ile	Leu	Ser	Ile	Ala
		100						105					110		
Leu	Leu	Thr	Leu	Thr	Val	Thr	Ser	Leu	Gly	Ala	Ala	Leu	Ala	Pro	Asn
		115					120					125			
Val	Ile	Ile	Leu	Ile	Ile	Cys	Arg	Cys	Ile	Met	Gly	Phe	Ala	Ile	Gly
	130					135					140				
Met	Asp	Ser	Pro	Val	Ala	Phe	Thr	Phe	Ile	Ala	Glu	Ile	Ser	Asn	Leu
145					150				155					160	
Lys	His	Lys	Gly	Arg	Asn	Val	Asn	Tyr	Trp	Gln	Val	Val	Trp	Tyr	Val
			165					170						175	
Ala	Ile	Val	Thr	Ser	Ala	Leu	Val	Val	Thr	Ala	Phe	Phe	Met	Leu	Gly
		180						185					190		
Ala	Gly	Ala	His	Leu	Trp	Arg	Tyr	Ala	Val	Gly	Phe	Gly	Ala	Leu	Ile
	195					200						205			
Ala	Phe	Val	Leu	Tyr	Ile	Leu	Arg	Ile	Lys	Tyr	Leu	His	Glu	Ser	Pro
210					215						220				
Thr	Trp	Val	Ile	Asn	His	Tyr	Ser	Leu	Glu	Lys	Ala	Thr	Glu	Phe	Ile
225				230					235					240	
Arg	Lys	Tyr	Tyr	His	Lys	Asp	Ile	His	Leu	Glu	Gly	Thr	Leu	Glu	Asp
			245					250						255	
Asp	Leu	Asn	Ser	Asp	Val	Thr	Ser	Pro	His	Asn	Ser	Trp	Thr	Asp	Leu
		260					265						270		
Phe	Lys	Pro	Arg	Tyr	Ile	Lys	Arg	Ile	Ile	Leu	Ala	Thr	Ala	Ile	Ser
		275					280					285			
Thr	Leu	Gln	Gly	Met	Gln	Tyr	Tyr	Gly	Val	Gly	Leu	Tyr	Ile	Pro	Ile
	290					295					300				
Ile	Ala	Thr	Tyr	Leu	Ile	Ser	Lys	Asp	Lys	Ile	Gly	Val	Leu	Leu	Gly
305					310					315				320	
Thr	Ala	Ile	Val	Asn	Ile	Ala	Gly	Ile	Leu	Gly	Ala	Tyr	Leu	Gly	Ala
			325						330					335	

Gln Leu Thr Tyr Lys Leu Gly Thr Arg Lys Leu Thr Met Ile Gly Phe
 340 345 350
 Thr Leu Val Leu Leu Ser Met Val Cys Val Gly Leu Phe Tyr His His
 355 360 365
 Leu Pro Met Leu Leu Asn Thr Phe Leu Ile Gly Leu Phe Leu Phe Gly
 370 375 380
 His Ser Gly Gly Pro Gly Thr Gln Gly Lys Thr Ile Gly Ala Leu Ser
 385 390 395 400
 Phe Pro Thr His Leu Arg Ser Gln Ala Thr Gly Phe Val Glu Ser Val
 405 410 415
 Ser Arg Thr Gly Ser Ile Ile Gly Thr Phe Val Phe Pro Ile Ile Leu
 420 425 430
 Ala Ala Val Gly Leu Thr Asn Thr Met Leu Ile Leu Ser Ile Val Pro
 435 440 445
 Leu Leu Gly Ile Ile Ile Thr Val Ser Ile Lys Trp Glu Ala Val Gly
 450 455 460
 Lys His Ile Glu Val Glu
 465 470

<210> 6992

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6992

Lys Glu Gly Ile Tyr Ile Lys Ile Leu Asn Ser Lys Ile Ile Glu Arg
 1 5 10 15
 Glu Ala Thr Leu Glu Ile Glu Ser Met Ala Thr Asn Cys Phe Phe Ile
 20 25 30
 Ser Pro Leu Ile Lys Lys Cys Lys Asn Ile Pro Gln Cys
 35 40 45

<210> 6993

<211> 68

<212> PRT

<213> S.epidermidis

<400> 6993

Arg Thr Val Phe Ile Met Lys Phe Lys Glu Leu Ile Lys Gln Ser Tyr
 1 5 10 15
 Glu Asp Leu Lys Asn Leu Thr Val Asn Trp Phe Asn Val Leu Ser Leu
 20 25 30
 Thr Val Ile Ile Phe Ile Leu Ser Asn Ile Val Thr Pro Leu Ile Gly
 35 40 45
 Ile Ser Val Gly Leu Leu Gly Gly Ala Tyr Ile Leu Lys Arg Arg Glu
 50 55 60
 Glu Lys Asn Lys
 65

<210> 6994

<211> 491

<212> PRT

<213> S.epidermidis

<400> 6994

Ile Asn Asn Leu Asn Phe Phe Leu Thr Pro Phe Ile Leu Ile Thr Tyr

1		5		10		15
Val	Gly	Ile	Leu	Lys	Ile	Lys
		20		25		30
Leu	Phe	Thr	Val	Ile	Asn	Val
		35		40		45
Leu	Asn	Ile	Met	Ala	Arg	Lys
		50		55		60
Thr	Ala	Leu	Ala	Ile	Gly	Ile
		65		70		75
Tyr	Gly	Ala	Glu	Ser	Lys	Thr
		85		90		95
Ile	Val	Gly	Asp	Gly	Tyr	Val
		100		105		110
Leu	Ile	Phe	Ile	Ser	Ile	Val
		115		120		125
Glu	Lys	Phe	Ala	Lys	Ile	Gly
		130		135		140
Thr	Val	Ala	Ile	Ala	Ala	Ile
		145		150		155
Gly	Leu	Asp	Ala	Ser	Ser	Ile
		165		170		175
Gly	Thr	Glu	Ile	Ser	Lys	Gln
		180		185		190
Pro	Gln	Gln	Ile	Leu	Glu	Val
		195		200		205
Thr	Gly	Gln	Arg	Thr	Thr	Ser
		210		215		220
Phe	Val	Gly	Phe	Ala	Tyr	Leu
		225		230		235
Gly	Ser	Leu	Leu	Lys	Arg	Gly
		245		250		255
Ala	Ile	Val	Thr	Phe	Val	Leu
		260		265		270
Ile	Met	Ala	Ser	Thr	Leu	Ala
		275		280		285
Leu	Gly	Lys	Phe	Leu	Ile	Ala
		290		295		300
Ile	Ile	His	Leu	Ile	Ile	Leu
		305		310		315
Tyr	Val	Lys	Lys	Thr	Ile	Glu
		325		330		335
Ser	Ser	Ala	Gly	Ala	Leu	Pro
		340		345		350
Leu	Gly	Val	Pro	Glu	Gly	Ile
		355		360		365
Ser	Ile	Gly	Gln	Asn	Gly	Cys
		370		375		380
Val	Met	Val	Ala	Pro	Val	Ala
		385		390		395
Val	Thr	Leu	Ile	Ala	Val	Val
		405		410		415
Val	Gly	Gly	Gly	Ala	Thr	Phe
		420		425		430
Asn	Leu	Pro	Val	Ala	Leu	Ala
		435		440		445
Ile	Asp	Met	Gly	Arg	Thr	Ala

450 455 460
 Gly Thr Gly Thr Ala Arg Leu Thr Asn His Trp Asp Lys Lys Thr Phe
 465 470 475 480
 Asp Ser Asn Asp Tyr Gly Asp Leu Ser Ala Asn
 485 490

<210> 6995
 <211> 58
 <212> PRT
 <213> S.epidermidis

<400> 6995
 Lys Ser Asp Phe Lys Met Phe Tyr Val Lys Gln Lys Leu Ser Leu Phe
 1 5 10 15
 Arg Lys Leu Gly Asp Leu Asn Asn Ile Phe Thr Thr Ile Asp Leu Arg
 20 25 30
 Tyr Lys Leu Lys Val Asn Asp Thr Phe Arg Leu Ile Asn Met Asp Glu
 35 40 45
 Lys Gly Tyr Cys Val Trp Tyr Ile Asn Phe
 50 55

<210> 6996
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 6996
 Glu Val Tyr Val Tyr Gln Lys Ser Glu Gln Arg Gly Arg Lys Glu Val
 1 5 10 15
 Tyr Ile Asn Lys Lys Asp Ala Cys Asn His Ala Ile Arg Arg His Asp
 20 25 30
 Cys Thr Arg Phe Tyr Leu Ile Leu
 35 40

<210> 6997
 <211> 68
 <212> PRT
 <213> S.epidermidis

<400> 6997
 Asn Gln Asn Val Tyr Asn Leu Thr Phe Lys Asp Tyr Gln Lys Ile Ile
 1 5 10 15
 Met Thr Lys Leu Leu Gln Leu Phe Lys Thr Ser Leu Ile Phe Asn Phe
 20 25 30
 Leu Leu Lys Phe Tyr Leu Glu Ile Val Ile Phe Lys Arg Tyr Leu Ile
 35 40 45
 Leu Phe Asp Ile Ile Thr Pro Ser Asn Glu Thr Arg Cys Asn Asn Ile
 50 55 60
 Glu Leu Ala Thr
 65

<210> 6998
 <211> 48
 <212> PRT
 <213> S.epidermidis

Phe	Tyr	Cys	Val	Ile	Asn	Ile	Leu	Asn	Cys	Gln	Asn	Ser	Glu	Gly	Met
1				5					10					15	
Phe	Gln	Lys	Asp	Gly	Val	Met	Lys	Leu	Thr	Arg	Ile	Ser	Lys	Thr	Ser
			20					25					30		
Pro	Lys	Lys	Met	Leu	Val	Gln	His	Leu	Phe	Trp	Ala	Ser	Lys	Ile	Met
		35					40					45			

<211> 188

<213> S.epidermidis

Arg	Gly	Arg	Phe	Leu	Leu	Cys	Asp	Ala	Phe	Thr	Arg	Arg	Ile	Leu	Lys
1				5					10					15	
Glu	Val	Thr	Met	Met	Asn	Thr	Ile	Lys	Ser	Thr	Ile	His	Thr	Glu	Ala
			20					25					30		
Ile	Phe	Ser	Asp	Asp	Glu	Gln	His	Arg	Tyr	Leu	Leu	Lys	Lys	Thr	Trp
		35					40					45			
Asp	Glu	Lys	Lys	Ala	Ala	Cys	Thr	Val	Ile	Thr	Met	Tyr	Pro	His	Leu
	50					55					60				
Asp	Gly	Val	Leu	Ser	Leu	Asp	Leu	Thr	Thr	Val	Leu	Ile	Leu	Asn	Gln
65				70						75				80	
Leu	Ala	Asn	Ser	Glu	Arg	Tyr	Gly	Ala	Val	Tyr	Leu	Val	Asn	Leu	Phe
			85						90				95		
Ser	Asn	Ile	Arg	Thr	Pro	Glu	Asn	Leu	Lys	His	Ile	Lys	Asn	Pro	Tyr
			100					105					110		
Asp	Glu	His	Thr	Asp	Ile	His	Leu	Met	Lys	Ala	Ile	Ser	Glu	Ser	Asp
		115					120					125			
Thr	Val	Ile	Leu	Ala	Tyr	Gly	Ala	Tyr	Ala	Lys	Arg	Pro	Val	Val	Ile
	130					135					140				
Asp	Arg	Val	Glu	Gln	Val	Met	Glu	Met	Leu	Lys	Pro	His	Lys	Lys	Lys
145				150						155				160	
Val	Lys	Lys	Leu	Ile	Asn	Pro	Val	Thr	Asn	Glu	Ile	Met	His	Pro	Leu
			165						170					175	
Asn	Pro	Lys	Ala	Arg	Gln	Lys	Trp	Ile	Leu	Lys	Ser				
			180					185							

<211> 64

<213> S.epidermidis

Thr	Leu	Ser	Val	Ser	Ile	Ser	Leu	Arg	Arg	Phe	Phe	Ile	Ile	Asn	Tyr
1				5					10					15	
Phe	Ile	Leu	Phe	Asp	Leu	Ser	Pro	Gly	Leu	Val	Ile	Phe	Leu	Ile	Phe
			20					25					30		
Leu	Ile	Tyr	Thr	Leu	Lys	Asn	Ile	Leu	Leu	Asn	Asn	Asn	Lys	Leu	Phe
		35					40					45			
Lys	Leu	Leu	Ile	Lys	Glu	Asp	Ile	Phe	Ile	Ser	Ile	Tyr	Phe	Ser	Ile
	50					55					60				

<211> 89

<212> PRT

<213> S.epidermidis

<400> 7001

```

Leu Phe Leu Val Met Ile Gly Tyr Val Asp Gln Ile Gly Arg Glu Ile
1          5          10          15
Gly Gly Val Val Phe Met Val Ser Cys Cys Ser Ile Asp Pro Tyr Thr
          20          25          30
Glu Phe Glu Val Ile Ile Ile Gly Ala Gly Val Pro Glu Val Ser Leu
          35          40          45
Ala Phe His Leu Thr Ser Tyr Gly Ile Arg Thr Ala Leu Ala Asp Glu
          50          55          60
Gln Asn Val Asp Asn Arg Leu Lys Asp Phe Leu Arg Thr Phe Gln Glu
65          70          75          80
Leu Ile Glu Arg Asp Ser Gly Met Pro
          85

```

<210> 7002

<211> 85

<212> PRT

<213> S.epidermidis

<400> 7002

```

Asn Pro Leu Val His Ile Phe Asn Asp Ile Arg Thr Lys Gly Phe Phe
1          5          10          15
Asn Ala Tyr Ser Thr Ser Ile Cys Leu Pro Thr Ala Ser His Phe Ile
          20          25          30
Asp Thr Val Met Ile Ile Pro Ser Lys Gly Thr Met Asp Lys Ile Asn
          35          40          45
Ile Val Phe Val Arg Pro Thr Ala Ala Arg Met Ile Gly Lys Thr Lys
          50          55          60
Val Pro Met Ile Leu Pro Val Arg Leu Thr Asp Ser Thr Lys Pro Val
65          70          75          80
Ala Cys Glu Arg Lys
          85

```

<210> 7003

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7003

```

Ser Met Leu Val Ile Glu Ala Asn Ile Tyr Phe Val Asn Leu Ser Ile
1          5          10          15
Tyr Met Asn Gln Phe Leu Gly Arg Lys Leu Glu Ile Leu Val Ile Glu
          20          25          30
Phe Arg Trp Arg Cys Phe Ala Trp
          35          40

```

<210> 7004

<211> 169

<212> PRT

<213> S.epidermidis

<400> 7004

```

Trp Val Phe Leu Val Ile Pro Ser Ile Tyr Glu Arg Ser Asn Met Met

```

3155

1		5		10		15
Ser	Asn	Ile	Thr	Val	Tyr	Asn
20						
Leu	Ala	Asp	Tyr	Asp	Asn	Trp
35						
Thr	Gln	His	Phe	Pro	Asn	Thr
50						
Thr	Ile	Phe	Glu	Gln	Ala	Leu
65						
Val	Glu	Lys	Tyr	Asn	Lys	Leu
85						
Trp	Lys	Gly	Gln	Asp	Val	Pro
100						
Gln	Thr	Leu	Pro	Glu	Arg	Ala
115						
Gln	Lys	Leu	Asp	Gln	Pro	Ile
130						
Leu	Met	Leu	Asn	Ala	Ile	His
145						
Glu	Met	Thr	Arg	Val	Leu	Arg
165						

<210> 7005
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 7005
Val
1
Val
20
Leu
35
Val
5
His
10
Arg
15
Gln
30
Leu
40
Gln
50
Val
60
Leu
70
Val
80
Arg
90
Val
100
Leu
110
His
120
Val
130
Leu
140
Val
150
Leu
160
Val
170
Leu
180
Val
190
Leu
200
Val
210
Leu
220
Val
230
Leu
240
Val
250
Leu
260
Val
270
Leu
280
Val
290
Leu
300
Val
310
Leu
320
Val
330
Leu
340
Val
350
Leu
360
Val
370
Leu
380
Val
390
Leu
400

<210> 7006
 <211> 630
 <212> PRT
 <213> S.epidermidis

<400> 7006
Val
1
Val
20
Leu
35
Val
5
Met
10
Thr
15
Phe
20
Asn
25
Gln
30
Leu
35
Ile
40
Leu
45
Lys
50
Asn
55
Gly
60
Ala
65
Thr
70
Ile
75
Val
80
Val
85
Leu
90
Met
95
Tyr
100
Ala
105
Val
110
Leu
115
Val
120
Leu
125
Val
130
Leu
135
Val
140
Leu
145
Val
150
Leu
155
Val
160
Leu
165
Val
170
Leu
175
Val
180
Leu
185
Val
190
Leu
195
Val
200
Leu
205
Val
210
Leu
215
Val
220
Leu
225
Val
230
Leu
235
Val
240
Leu
245
Val
250
Leu
255
Val
260
Leu
265
Val
270
Leu
275
Val
280
Leu
285
Val
290
Leu
295
Val
300
Leu
305
Val
310
Leu
315
Val
320
Leu
325
Val
330
Leu
335
Val
340
Leu
345
Val
350
Leu
355
Val
360
Leu
365
Val
370
Leu
375
Val
380
Leu
385
Val
390
Leu
395
Val
400

				565					570					575			
Ala	Leu	Leu	His	Ala	Leu	Phe	Ala	Ala	Leu	Ala	Phe	Met	Lys	Leu	Leu		
			580					585					590				
Gly	Asn	Val	Ser	Met	Ser	Pro	Ile	Phe	Ile	Val	Met	Ile	Ile	Tyr	Thr		
		595					600					605					
Ile	Val	Tyr	Phe	Ile	Phe	Ala	Met	Ile	Ser	Phe	Ile	His	Ser	Ser	Arg		
	610					615					620						
Met	Ile	Lys	His	Ser	Ile												
625					630												

<210> 7007

<211> 496

<212> PRT

<213> S.epidermidis

<400> 7007

Lys	Ser	Gln	Val	Ile	His	Ser	Leu	Asn	Gln	Ile	Thr	Arg	Phe	Leu	Pro		
1				5					10					15			
Pro	Leu	Leu	Gly	Glu	Ile	Asn	Met	Asp	Glu	Asn	Lys	Leu	Gly	Lys	Thr		
			20					25					30				
Ser	Leu	Ile	Gly	Leu	Val	Ile	Gly	Ser	Met	Ile	Gly	Gly	Gly	Ala	Phe		
		35					40					45					
Asn	Ile	Ile	Ser	Asp	Met	Gly	Gly	Gln	Ala	Gly	Gly	Leu	Ala	Ile	Ile		
	50					55					60						
Ile	Gly	Trp	Ile	Ile	Thr	Ala	Ile	Gly	Met	Ile	Ser	Leu	Ala	Phe	Val		
65					70					75					80		
Phe	Gln	Asn	Leu	Thr	Asn	Glu	Arg	Pro	Asp	Leu	Asp	Gly	Gly	Ile	Tyr		
			85						90					95			
Ser	Tyr	Ala	Gln	Thr	Gly	Phe	Gly	Asp	Phe	Ile	Gly	Phe	Ser	Ser	Ala		
			100					105					110				
Trp	Gly	Tyr	Trp	Phe	Ala	Ala	Phe	Leu	Gly	Asn	Val	Ala	Tyr	Ala	Thr		
		115					120					125					
Leu	Leu	Met	Ser	Ala	Val	Gly	Asn	Phe	Phe	Pro	Ile	Phe	Lys	Gly	Gly		
	130					135					140						
Asn	Thr	Leu	Pro	Ser	Ile	Ile	Ile	Ala	Ser	Ile	Leu	Leu	Trp	Gly	Val		
	145				150					155					160		
His	Phe	Leu	Ile	Leu	Arg	Gly	Val	Glu	Thr	Ala	Ala	Phe	Ile	Asn	Ser		
				165				170						175			
Ile	Val	Thr	Val	Ala	Lys	Leu	Ile	Pro	Ile	Phe	Leu	Val	Ile	Ile	Cys		
		180						185					190				
Met	Ile	Val	Val	Phe	Asn	Phe	Ser	Thr	Phe	Lys	Ser	Gly	Phe	Tyr	Gly		
	195						200					205					
Met	Thr	Ser	Gly	Ser	Val	Gly	Val	Phe	Ser	Trp	Gly	Asp	Thr	Met	Ala		
	210					215					220						
Gln	Val	Lys	Ser	Thr	Met	Leu	Val	Thr	Val	Trp	Val	Phe	Thr	Gly	Ile		
	225				230					235					240		
Glu	Gly	Ala	Val	Val	Phe	Ser	Gly	Arg	Ala	Lys	Ser	Lys	Lys	Asp	Val		
			245					250						255			
Gly	Thr	Ala	Thr	Val	Ile	Gly	Leu	Ile	Ser	Val	Leu	Val	Ile	Tyr	Phe		
		260					265						270				
Leu	Met	Thr	Val	Leu	Ala	Gln	Gly	Val	Ile	His	Gln	Asn	Gln	Ile	Ser		
	275					280						285					
Lys	Leu	Ala	Asn	Pro	Ser	Met	Ala	Gln	Val	Leu	Glu	His	Ile	Val	Gly		
	290					295					300						
His	Trp	Gly	Ser	Val	Leu	Val	Asn	Ile	Gly	Leu	Ile	Ile	Ser	Val	Leu		
	305				310					315					320		

Gly Ala Trp Leu Gly Trp Thr Leu Leu Ala Gly Glu Leu Pro Phe Ile
 325 330 335
 Val Ala Lys Asp Gly Leu Phe Pro Lys Trp Phe Ala Lys Glu Asn Lys
 340 345 350
 Asn Lys Ala Pro Val Asn Ala Leu Ile Ile Thr Asn Ile Leu Val Gln
 355 360 365
 Leu Phe Leu Ile Ser Met Leu Phe Thr Asp Ser Ala Tyr Gln Phe Ala
 370 375 380
 Phe Ser Leu Ala Ser Ser Ala Ile Leu Ile Pro Tyr Thr Leu Ser Ala
 385 390 395 400
 Phe Tyr Gln Val Lys Tyr Thr Ile Gln Asn Lys Ser Lys Ala Asn Leu
 405 410 415
 Lys Gln Trp Ile Ile Gly Ile Ile Ala Ser Ile Tyr Thr Ile Trp Leu
 420 425 430
 Val Tyr Ala Ala Gly Leu Asp Tyr Leu Leu Leu Thr Met Leu Leu Tyr
 435 440 445
 Ile Pro Gly Leu Leu Val Tyr Ser Tyr Val Gln Arg Asp Asn Asn Lys
 450 455 460
 His Leu Thr Lys Leu Asp Tyr Thr Leu Phe Ile Phe Ile Ile Val Leu
 465 470 475 480
 Ala Ile Ile Gly Ile Val Arg Leu Ile Thr Gly Asn Ile Ser Val Phe
 485 490 495

<210> 7008

<211> 83

<212> PRT

<213> S.epidermidis

<400> 7008

Phe Phe Lys Val Tyr Ser Asp Met Leu Ile Phe Leu Ser Tyr Asp Phe
 1 5 10 15
 Val Arg Ala Cys Leu Pro Arg Gly Met Ala Arg Ala Ile Ser Leu Ser
 20 25 30
 His Ile Leu Phe Pro Gln Ala Ser Ala Leu Thr Lys Ser Val Val Ile
 35 40 45
 Phe Ile Phe Ile Arg Ile Leu Thr Glu Ile Ile Leu Ile Arg Gly Ile
 50 55 60
 Val Lys Ala Ile Leu Ser Lys Ile Ala Asp Lys Arg Phe Val Lys Ser
 65 70 75 80
 Ser Ser Lys

<210> 7009

<211> 76

<212> PRT

<213> S.epidermidis

<400> 7009

Leu Leu Lys Val Leu Asn Arg Val Asp Leu Leu Val Glu Ile Ser Thr
 1 5 10 15
 Tyr Val Ala Leu Leu Asn Ala Gln Asn Ala Glu Ile Ile Trp Tyr Val
 20 25 30
 Asp Gly Arg Ile Ile Lys Arg Lys Ser Pro Lys Asn Gly Gln Ser Ser
 35 40 45
 Gly Ile Thr Phe Val Pro Tyr Ser Ile Val Gln Gly Val Leu His Val
 50 55 60

Thr Val Ile Pro Ser Met Leu Lys Ser Ser Ser Val
65 70 75

<210> 7010

<211> 381

<212> PRT

<213> S.epidermidis

<400> 7010

Ile Lys Gly Val Leu Glu Val Lys Thr Arg Ala Ala Val Leu His Glu
1 5 10 15
Met Gly Ala Lys Lys Pro Tyr Lys Glu Ser Lys Pro Leu Lys Ile Glu
20 25 30
Tyr Leu Glu Leu Asp Asn Pro Ser Glu His Glu Val Leu Ile Lys Ile
35 40 45
His Ala Ala Gly Leu Cys His Ser Asp Leu Ser Val Ile Asn Gly Asn
50 55 60
Arg Pro Arg Pro Leu Pro Met Ala Leu Gly His Glu Ala Ser Gly Glu
65 70 75 80
Val Ile Lys Val Gly Lys Ala Val Thr Arg Val Ser Glu Gly Asp His
85 90 95
Val Val Cys Thr Phe Ile Pro Ser Cys Gly Lys Cys Ile Pro Cys Lys
100 105 110
Glu Gly Arg Pro Ala Leu Cys Glu Asn Gly Ala Ile Ser Asn Glu Lys
115 120 125
Gly Glu Met Leu Glu Gly Gly Met Arg Leu Ser Asn Asp Glu Gly Lys
130 135 140
Val Tyr His His Leu Gly Ile Ser Gly Phe Ala Glu Tyr Ser Val Val
145 150 155 160
Ser Glu Asn Ser Ile Val Lys Ile Asp Lys Lys Ile Pro Phe Glu Arg
165 170 175
Ala Ala Ala Phe Gly Cys Ala Ile Ile Thr Gly Ile Gly Ala Val Val
180 185 190
Asn Thr Ala Gln Ile Arg Ser Gly Ser Asn Val Ala Val Val Gly Leu
195 200 205
Gly Gly Ile Gly Leu Asn Ala Ile Ile Gly Ala Lys Leu Ala Gly Ala
210 215 220
Asn Glu Ile Ile Ala Leu Asp Ile Asn Glu Asp Lys Phe Glu Leu Ala
225 230 235 240
Lys Gln Phe Gly Ala Thr Ala Thr Phe Asn Ser Ser Asp Lys Asp Ile
245 250 255
Asp Glu Gln Ile Lys Glu Tyr Ile Pro Gly Gly Val Glu Tyr Ala Phe
260 265 270
Glu Thr Ala Gly Val Val Pro Ala Met Lys Val Ala Tyr Gln Ile Thr
275 280 285
Lys Arg Gly Gly Thr Thr Val Thr Thr Gly Leu Pro Asn Pro Lys Asp
290 295 300
Asn Phe Ser Phe Pro Gln Val Thr Leu Ala Ala Glu Glu Arg Thr Ile
305 310 315 320
Lys Gly Ser Tyr Val Gly Ser Cys Val Pro Asp Arg Asp Ile Pro Arg
325 330 335
Phe Val Asn Leu Tyr Asn Gln Gly Arg Leu Asn Ile Asp Ser Leu Ile
340 345 350
Ser Glu Val Ile Thr Leu Asp Glu Ile Asn Glu Gly Phe Asp Arg Leu
355 360 365
Ser Asn Gly Glu Val Gly Arg Ile Ile Met Lys Met His

370

375

380

<210> 7011

<211> 80

<212> PRT

<213> S.epidermidis

<400> 7011

Ser	Lys	Gly	Val	Leu	Ser	Met	Asn	His	Asp	Asn	Thr	Ile	Gln	Ser	Asn
1				5					10					15	
Trp	Arg	Thr	Val	Ala	Ser	Cys	Leu	Ala	Ser	Gln	Asn	Tyr	Ile	Ser	Ile
			20					25					30		
Val	Lys	Gly	Leu	Val	His	His	Phe	Thr	Ala	Ile	Asp	Asp	Glu	Glu	Ile
		35					40					45			
Leu	Asp	Lys	Ile	Tyr	Glu	Glu	Phe	Ile	Asn	Asp	Asp	Ser	Ile	Thr	Thr
	50					55				60					
Val	Leu	Asn	Asn	Asp	Leu	Gln	Thr	Ile	Ile	Asn	His	Tyr	Leu	Ser	Lys
65					70					75					80

<210> 7012

<211> 87

<212> PRT

<213> S.epidermidis

<400> 7012

Gln	Lys	Gly	Val	Phe	Cys	Met	Asn	Tyr	Phe	Arg	Tyr	Lys	Gln	Phe	Asn
1				5					10					15	
Lys	Asp	Val	Ile	Thr	Val	Ala	Val	Gly	Tyr	Tyr	Leu	Arg	Tyr	Ala	Leu
			20					25					30		
Ser	Tyr	Arg	Asp	Ile	Ser	Glu	Ile	Leu	Arg	Glu	Arg	Gly	Val	Asn	Val
		35					40					45			
His	His	Ser	Thr	Val	Tyr	Arg	Trp	Val	Gln	Glu	Tyr	Ala	Pro	Ile	Leu
	50					55				60					
Tyr	Gln	Ile	Trp	Lys	Lys	Lys	His	Lys	Lys	Leu	Ile	Thr	Asn	Gly	Val
65				70						75					80
Leu	Met	Arg	Arg	Thr	Ser	Lys									
				85											

<210> 7013

<211> 230

<212> PRT

<213> S.epidermidis

<400> 7013

Gln	Lys	Gly	Val	Phe	Cys	Met	Asn	Tyr	Phe	Arg	Tyr	Lys	Gln	Phe	Asn
1				5					10					15	
Lys	Asp	Val	Ile	Thr	Val	Ala	Val	Gly	Tyr	Tyr	Leu	Arg	Tyr	Ala	Leu
			20					25					30		
Ser	Tyr	Arg	Asp	Ile	Ser	Glu	Ile	Leu	Arg	Glu	Arg	Gly	Val	Asn	Val
		35					40					45			
His	His	Ser	Thr	Val	Tyr	Arg	Trp	Val	Gln	Glu	Tyr	Ala	Pro	Ile	Leu
	50					55				60					
Tyr	Gln	Ile	Trp	Lys	Lys	Lys	His	Lys	Lys	Ala	Tyr	Tyr	Lys	Trp	Arg
65				70						75					80
Ile	Asp	Glu	Thr	Tyr	Ile	Lys	Ile	Lys	Gly	Lys	Trp	Ser	Tyr	Leu	Tyr
				85					90					95	

Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Met Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys
 195 200 205
 Asn Arg Arg Ser Leu Gln Ile Tyr Gly Phe Ser Pro Cys His Glu Ile
 210 215 220
 Ser Ile Met Leu Ala Ser
 225 230

<210> 7014

<211> 80

<212> PRT

<213> S.epidermidis

<400> 7014

Glu Ile Leu Val Gln Glu Val Val Val Glu Gly Asn Ile Thr Leu Gly
 1 5 10 15
 Gln Phe Leu Lys Thr Glu Gly Ile Ile Glu Ser Gly Gly Gln Ala Lys
 20 25 30
 Trp Phe Leu Gln Asp Phe Glu Val Leu Ile Asn Gly Gln Arg Glu Thr
 35 40 45
 Arg Arg Gly Lys Lys Leu Glu His Asn Asp Arg Ile Asp Ile Thr Asp
 50 55 60
 Ile Pro Glu Asp Thr Gly Ser Phe Leu Ile Ile His Gln Gly Glu Gln
 65 70 75 80

<210> 7015

<211> 466

<212> PRT

<213> S.epidermidis

<400> 7015

Lys Asp Lys Val Arg Gln Ser Leu Leu Arg Phe Leu Ala Lys Ser Leu
 1 5 10 15
 Lys Thr Val Ile Gly Met Asn Asn Lys Glu His Thr Lys Ser Ile Ile
 20 25 30
 Leu Val Leu Leu Val Leu Met Ser Ile Val Leu Thr Tyr Met Val Trp
 35 40 45
 Asn Phe Ser Pro Asp Leu Ser Asn Ile Asp Asn Thr Asp Asn Ser Lys
 50 55 60
 Ser Asp Lys Pro Lys Pro Leu Thr Lys Pro Met Thr Ala Glu Met Glu
 65 70 75 80
 Gly Thr Ile Thr Pro Phe Gln Ile Val His Ser Arg Asp Asp Lys Ser
 85 90 95
 Gln Gly Thr Val Ala Ser Gly Ala Val Leu Asp Lys Met Ile Gln Pro
 100 105 110

Leu Lys Asn Gln Glu Val Lys Ser Val Ser His Leu Lys Arg Glu His
 115 120 125
 Asn Leu Val Ile Pro Glu Leu Ser Asn Asp Phe Ile Val Leu Asp Phe
 130 135 140
 Thr Tyr Asp Leu Pro Leu Ser Thr Tyr Leu Ser Gln Val Leu Asp Ile
 145 150 155 160
 Asp Ala Lys Val Pro Asn Asn Phe Asn Phe Asp Arg Leu Leu Ile Asp
 165 170 175
 Gln Asp His Asn Asn His Val Val Leu Phe Ala Ile Ser Lys Asp Arg
 180 185 190
 His Glu Val Val Lys Leu Lys Thr Thr Met Lys Gly Asn Asn Val Asp
 195 200 205
 Lys Ala Phe Lys Ser Ile Glu Pro Asp Met Gln Pro Tyr Thr Glu Ile
 210 215 220
 Ile Thr Asn Lys Asp Thr Ile Asp Lys Ala Thr His Val Phe Ala Pro
 225 230 235 240
 Ser Lys Pro Lys Asp Leu Lys Thr Tyr Arg Met Val Phe Asn Thr Ile
 245 250 255
 Ser Val Glu Arg Met Asn Ser Ile Leu Phe Asp Asp Ser Thr Ile Val
 260 265 270
 Arg Ser Ser Gln Ser Gly Thr Thr Thr Tyr Asn Asn Asn Thr Gly Val
 275 280 285
 Ala Asn Tyr Asn Asp Lys Asp Glu Met Tyr His Tyr Lys Asn Leu Ser
 290 295 300
 Glu Asp Ala Lys Ser Ser Ser Asn Met Gln Glu Thr Ile Pro Gly Thr
 305 310 315 320
 Tyr Glu Phe Ile Asn Ser His Gly Gly Phe Leu Asn Glu Asp Tyr Arg
 325 330 335
 Leu Phe Lys Thr Asp Asn Arg Thr Gly Lys Leu Thr Tyr Gln Arg Phe
 340 345 350
 Leu Asn Gly Tyr Pro Thr Phe Asn Lys Gln Asn Phe Asn Glu Ile Gln
 355 360 365
 Val Thr Trp Gly Asp Lys Gly Val Tyr Asp Tyr Gln Arg Ser Leu Leu
 370 375 380
 Lys Thr Asp Val Thr Leu Asn Ser Glu Glu Ser Lys Ser Val Pro Thr
 385 390 395 400
 Val Glu Ser Val Arg Ser Ala Leu Ala Asn His Pro Asp Ile Asp Phe
 405 410 415
 Glu Lys Val Thr Asn Ile Ala Ile Gly Tyr Asp Met Asp Asp Lys Ala
 420 425 430
 Asn Asn Glu Asp Ile Glu Val Gln Arg Asn Cys Glu Leu Ile Pro Arg
 435 440 445
 Trp Phe Val Glu Tyr Asp Gly Asn Trp Tyr Ala Tyr Lys Asp Gly Arg
 450 455 460
 Leu Glu
 465

<210> 7016

<211> 70

<212> PRT

<213> S.epidermidis

<400> 7016

Glu Val Arg Val Leu Ser Phe Tyr Arg Phe Met Lys Asn Phe Glu Gly
 1 5 10 15
 Glu Lys Ser His Phe Gly Asp Leu Phe Glu Gly Met Lys Asp Ile Asn

<213> S.epidermidis

<400> 7020

```

Ser Asn Thr Leu His Arg Ser Asp Lys Met Pro Ser Arg Trp Val Lys
1          5          10          15
Val Lys Thr Phe Lys Ser Leu Ser Thr Ser Lys Leu Glu Lys Lys Leu
          20          25          30
Gln Asn Phe Lys Ser Tyr Asn Ser Phe Asp Ile Ile Glu Ile Lys Arg
          35          40          45
His Ser Tyr Leu Phe Leu Asn Ile Val Glu Val Tyr Tyr Lys Asp Lys
          50          55          60
Thr
65

```

<210> 7021

<211> 41

<212> PRT

<213> S.epidermidis

<400> 7021

```

Leu Glu Thr Leu Ile Tyr Glu Leu Ile Asp Asn Ser Thr Asn Asn Ser
1          5          10          15
Lys Phe Ser Ser Asn Ala Val Gly Leu Phe Asp Arg Asn Glu Glu Gln
          20          25          30
Arg Phe Arg Leu Ser Asn Glu Cys Leu
          35          40

```

<210> 7022

<211> 71

<212> PRT

<213> S.epidermidis

<400> 7022

```

Leu Trp Ala Phe Leu Ala Ile Gln Arg Pro Ser Ser Val Leu Pro Lys
1          5          10          15
Leu Ala Tyr Arg Phe Ser Gln Gln Val Gly Lys Gln Tyr Thr Tyr Gly
          20          25          30
Lys Gly Leu Glu Glu Leu Ser Glu Val Glu Gln Leu Lys Leu Glu Asn
          35          40          45
Lys Arg Lys Asp Ile Glu Leu Asp Ile Leu Lys Lys Tyr Lys Val Leu
          50          55          60
Glu Arg Lys Trp Tyr Gln Gln
65          70

```

<210> 7023

<211> 53

<212> PRT

<213> S.epidermidis

<400> 7023

```

Leu Ile Lys Leu Arg Ser Ile Leu Ile Gly Ser Val Ala Leu Ala Lys
1          5          10          15
Leu Glu Ala Trp Ile Leu Phe Ala Val Val Lys Met Ser Pro Ser His
          20          25          30
Asp Arg Arg Asp Ala Gly Pro Gly Ile Asn Glu Asn Glu Arg Gly Trp
          35          40          45

```


Phe Gly Arg Tyr Lys
50

<210> 7024

<211> 44

<212> PRT

<213> S.epidermidis

<400> 7024

Met	Tyr	Lys	Phe	Lys	Thr	Leu	Phe	Asn	Asp	Arg	Asp	Val	Lys	Gly	Val
1				5					10					15	
Thr	Gln	Phe	Tyr	Glu	Lys	Glu	Ser	His	Tyr	Ile	Leu	Asp	Thr	Ser	Val
			20					25					30		
Val	Phe	Asn	Thr	Cys	Ser	Met	Leu	Lys	Tyr	Glu	Arg				
		35					40								

<210> 7025

<211> 303

<212> PRT

<213> S.epidermidis

<400> 7025

Phe	Asn	Lys	Phe	Gly	Gly	Val	Ile	Leu	Met	Ile	Asp	Ser	Ile	Ile	Glu
1				5					10					15	
Phe	Ile	Lys	Thr	Phe	Leu	Met	Leu	Phe	Phe	Glu	Leu	Leu	Ile	Leu	Phe
			20					25					30		
Ile	Ile	Val	Ser	Phe	Ile	Val	Ser	Leu	Ile	Gln	Gln	Val	Val	Ser	Glu
		35					40					45			
Asp	Lys	Ile	Lys	Ser	Met	Leu	Ser	Lys	Pro	Asn	Gln	Gly	Ile	Asn	Tyr
	50					55				60					
Phe	Phe	Gly	Met	Ile	Phe	Gly	Ala	Ile	Thr	Pro	Phe	Cys	Ser	Cys	Ser
65				70					75					80	
Thr	Ile	Pro	Ile	Leu	Ala	Gly	Leu	Leu	Asn	Ser	Lys	Val	Pro	Phe	Gly
			85					90						95	
Pro	Ala	Val	Ser	Phe	Leu	Ile	Ala	Ser	Pro	Leu	Met	Asn	Pro	Leu	Met
			100					105					110		
Val	Phe	Met	Leu	Trp	Val	Leu	Leu	Gly	Trp	Lys	Val	Ala	Ile	Val	Tyr
		115				120						125			
Phe	Ile	Val	Leu	Ala	Ile	Phe	Ser	Ile	Phe	Thr	Gly	Leu	Val	Phe	Ser
	130				135					140					
Lys	Met	Asn	Leu	Ala	Glu	Ser	Tyr	Lys	Gly	Val	Asn	Val	Lys	Gly	Asp
145				150					155					160	
Gly	Phe	Phe	Ala	Asn	Lys	Glu	Gly	Ser	Arg	Phe	Lys	Gln	Ala	Leu	Asn
			165					170						175	
Asp	Ala	Trp	Ala	Phe	Leu	Tyr	Pro	Met	Leu	Pro	Tyr	Leu	Phe	Ile	Gly
		180					185						190		
Val	Phe	Ile	Gly	Ala	Phe	Ile	Tyr	Gly	Phe	Val	Pro	Glu	Thr	Phe	Ile
		195				200						205			
Thr	Lys	Tyr	Ala	Ser	Gly	Asp	Gly	Val	Ile	Ser	Val	Phe	Ile	Gly	Ser
	210				215					220					
Val	Ile	Gly	Ile	Pro	Met	Tyr	Ile	Arg	Pro	Glu	Thr	Met	Leu	Pro	Ile
225				230					235					240	
Ala	Glu	Ala	Leu	Val	Ser	Lys	Gly	Met	Ser	Leu	Gly	Thr	Val	Val	Ala
			245					250						255	
Leu	Ile	Ile	Gly	Gly	Ala	Gly	Ala	Ser	Ile	Pro	Glu	Val	Val	Leu	Leu
			260				265						270		

Thr Lys Leu Phe Lys Lys Lys Phe Val Val Ser Phe Val Ile Ala Ile
 275 280 285
 Leu Val Val Ala Ile Ala Thr Gly Leu Ile Val Asn Ile Val Ile
 290 295 300

<210> 7026
 <211> 110
 <212> PRT
 <213> S.epidermidis

<400> 7026
 His Asp Lys Leu Val Val Ser Tyr Ile Phe Leu Leu Cys Asn Arg Thr
 1 5 10 15
 Leu Phe Phe Gly Ala Thr Trp Gly Pro Ile Met Trp Val Met Leu Pro
 20 25 30
 Glu Met Phe Pro Thr Arg Ala Arg Gly Ala Ala Thr Gly Ile Ala Ile
 35 40 45
 Val Val Leu Gln Ile Gly Thr Leu Ile Ile Ser Gln Val Phe Pro Ile
 50 55 60
 Leu Val Asn Met Leu Glu Val Gln Tyr Val Phe Leu Ile Phe Ala Val
 65 70 75 80
 Ile Gly Ala Leu Ala Leu Ile Phe Val Val Lys Phe Leu Pro Glu Thr
 85 90 95
 Arg Gly Lys Ser Leu Glu Glu Ile Glu Leu Gln Leu Gln Asn
 100 105 110

<210> 7027
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 7027
 Leu Ile Phe Ser Ala Ile Ser Asp Gln Ile Asn Val Glu Gly Ile Ala
 1 5 10 15
 Pro Asn Pro Thr Asn Ile Gln Leu Lys Val Ala Tyr Ser Ala Thr Glu
 20 25 30
 Gly Ile Asp Leu Thr Ile Ala Thr Arg Lys Val Pro Val Ile Ile
 35 40 45

<210> 7028
 <211> 271
 <212> PRT
 <213> S.epidermidis

<400> 7028
 Tyr Lys Phe Ser Asp Asn Leu Gly Glu Gly Tyr Asn Met Thr Leu Thr
 1 5 10 15
 Asn Lys Glu Val Ala Lys Val Leu Phe Lys Ala Tyr Arg Tyr Lys Lys
 20 25 30
 Pro Ile Asp Phe Ile Ser Glu Asn Tyr Gln Leu Asn Glu Glu Glu Ala
 35 40 45
 Tyr His Val Gln Glu Glu Leu Ile Asp Gln Leu Thr Phe Lys Asp Arg
 50 55 60
 Ser Thr Val Thr Gly Tyr Lys Val Ser Met Thr Ser Lys Ala Thr Gln
 65 70 75 80
 Ala Ile Ala Asn Thr Asn Glu Pro Ala Tyr Gly Thr Leu Leu Ser Asn

				85					90					95			
Gln	Ile	Val	Asn	Asp	Gly	Ala	Ser	Val	Ser	Leu	Ser	Glu	Leu	Phe	Ser		
			100					105					110				
Pro	Leu	Leu	Glu	Pro	Glu	Ile	Ile	Phe	Ile	Val	Gln	Glu	Asp	Leu	Pro		
		115					120					125					
Tyr	Asp	Ala	Asp	Leu	Glu	Thr	Ile	Arg	Tyr	His	Thr	Arg	Ile	Ala	Pro		
	130					135					140						
Gly	Ile	Glu	Ile	Pro	Asp	Ala	Arg	Tyr	Lys	Asn	Trp	Phe	Pro	Asn	Phe		
145					150					155					160		
Thr	Leu	Ser	Asp	Leu	Ile	Ser	Asp	Asn	Thr	Ala	Thr	Gly	Leu	Val	Val		
			165						170					175			
Val	Gly	Asp	Pro	Val	Asp	Gly	Leu	Asp	Asn	Asp	Ala	Phe	Ala	Asn	Val		
			180					185					190				
His	Leu	Asn	Leu	Tyr	Lys	Asp	Asp	Lys	Cys	Ile	Ala	Thr	Gly	Glu	Ser		
		195				200						205					
Ser	Glu	Val	Leu	Gly	Asn	Pro	Leu	Asn	Ala	Ile	His	Trp	Leu	Ile	Lys		
	210				215						220						
Lys	Leu	His	Thr	His	Gly	Lys	Gln	Leu	Lys	Lys	Gly	Asp	Ile	Ile	Ser		
225					230					235					240		
Ser	Gly	Thr	Phe	Ile	Ser	Pro	Leu	Lys	Leu	Glu	Tyr	Gly	Thr	Tyr	Arg		
			245					250						255			
Ala	Glu	Tyr	Ser	Gly	Ile	Gly	Lys	Val	Ser	Phe	Ser	Val	Asn	Lys			
		260					265						270				

<210> 7029

<211> 80

<212> PRT

<213> S.epidermidis

<400> 7029

Val	Ala	Lys	Phe	Ile	Gly	Lys	Gly	Thr	Tyr	Ile	Glu	Asp	Ile	Val	Asn		
1				5					10					15			
Gly	Ser	Phe	Leu	Lys	Ser	Gln	Asp	Asp	Leu	Lys	Leu	Lys	Ala	Ser	Asp		
			20				25						30				
Phe	Thr	Val	Glu	Asp	Asn	Tyr	Asn	Tyr	Gly	Val	Leu	Ile	Phe	Pro	Glu		
		35				40					45						
Asn	Leu	Ser	Leu	Thr	Asp	Asn	Asn	Lys	Lys	Leu	Glu	Ser	Leu	Ile	Lys		
	50				55					60							
Thr	Ile	Leu	Phe	Thr	Gly	Lys	Arg	Tyr	Gln	Tyr	Thr	Tyr	Phe	Lys	Ile		
65					70				75					80			

<210> 7030

<211> 616

<212> PRT

<213> S.epidermidis

<400> 7030

Arg	Arg	Leu	Ser	Met	Ser	His	Leu	Leu	Asn	Gln	Leu	Lys	Ser	Asn	Val		
1				5					10					15			
Leu	Val	Ala	Asp	Gly	Ala	Ile	Gly	Thr	Ile	Phe	Tyr	Ser	Glu	Gly	Leu		
		20					25						30				
Asp	Thr	Cys	Pro	Glu	Ala	Tyr	Asn	Leu	Thr	His	Pro	Asp	Lys	Val	Glu		
	35					40					45						
Arg	Ile	His	Arg	Ser	Tyr	Ile	Glu	Ala	Gly	Ala	Asp	Val	Ile	Gln	Thr		
	50				55				60								
Asn	Thr	Tyr	Gly	Ala	Asn	Phe	Glu	Lys	Leu	Lys	Ser	Phe	Gly	Leu	Glu		

65					70					75				80
His	Lys	Val	Lys	Glu	Ile	His	Gln	Ala	Ala	Val	Gln	Ile	Ala	Lys
				85					90					95
Ala	Ala	Asn	Glu	Asp	Thr	Ile	Ile	Leu	Gly	Thr	Val	Gly	Gly	Phe
			100					105					110	
Gly	Val	Arg	Gln	Glu	Asp	Ile	Ser	Leu	Ser	Thr	Ile	Gln	Tyr	His
		115					120					125		Thr
Glu	Leu	Gln	Ile	Asp	Thr	Leu	Ile	Asp	Glu	Gly	Val	Asp	Ala	Leu
	130					135					140			Leu
Phe	Glu	Thr	Tyr	Tyr	Asp	Leu	Asp	Glu	Leu	Thr	Arg	Ile	Val	Thr
145					150					155				Ala
Thr	Arg	Gln	Lys	Tyr	Asp	Ile	Pro	Ile	Ile	Ala	Gln	Leu	Thr	Ala
			165						170					Ser
Asn	Thr	Asn	Tyr	Leu	Val	Asp	Gly	Thr	Glu	Ile	Asn	Ala	Ala	Leu
		180						185				190		Lys
Tyr	Val	Val	Glu	Cys	Gly	Ala	Asn	Val	Val	Gly	Leu	Asn	Cys	His
	195						200					205		His
Gly	Pro	His	His	Met	Gln	Arg	Ser	Phe	Ser	His	Ile	Glu	Leu	Pro
	210					215					220			Lys
His	Ala	Tyr	Leu	Ser	Cys	Tyr	Pro	Asn	Ala	Ser	Leu	Leu	Asp	Ile
225					230					235				Glu
Asn	Ser	Glu	Phe	Lys	Tyr	Ser	Asp	Asn	Ala	Gln	Tyr	Phe	Gly	Asp
			245						250					Ile
Ala	Gln	Glu	Leu	Ile	Asn	Glu	Gly	Val	Arg	Leu	Ile	Gly	Gly	Cys
		260						265					270	Cys
Gly	Thr	Thr	Pro	Glu	His	Ile	Arg	Tyr	Ile	Lys	Ser	Ala	Val	Lys
	275						280					285		His
Leu	Lys	Pro	Val	Lys	Asp	Lys	Lys	Val	Ile	Pro	Ile	Asn	Lys	Ala
	290					295					300			Ser
Ser	Gln	Lys	Gln	Thr	Arg	Val	Leu	Lys	Gln	Asn	Leu	Thr	Ser	Lys
305					310					315				Val
Lys	Asn	Gly	Pro	Thr	Val	Ile	Val	Glu	Leu	Asp	Thr	Pro	Lys	His
			325						330					Leu
Asp	Thr	Asp	Thr	Phe	Phe	Asp	Asn	Val	Gly	Lys	Leu	Asp	Glu	Ala
		340						345				350		Gly
Ile	Asp	Ala	Val	Thr	Leu	Ala	Asp	Asn	Ser	Leu	Ala	Thr	Val	Arg
	355						360					365		Val
Ser	Asn	Ile	Ala	Ala	Ala	Ser	Leu	Ile	Lys	Gln	Arg	Tyr	Asp	Ile
	370					375					380			Glu
Pro	Leu	Val	His	Val	Thr	Cys	Arg	Asp	Arg	Asn	Leu	Ile	Gly	Leu
385					390					395				Gln
Ser	His	Leu	Leu	Gly	Leu	Ser	Leu	Ile	Gly	Val	Asn	Glu	Ile	Leu
			405						410				415	Ala
Ile	Thr	Gly	Asp	Pro	Ser	Lys	Val	Gly	His	Leu	Pro	Gly	Ala	Thr
		420						425					430	Asn
Val	Tyr	Asp	Val	Asn	Ser	Lys	Gly	Leu	Thr	Glu	Leu	Ala	Leu	Arg
	435						440					445		Phe
Asn	Lys	Gly	Ile	Asn	Thr	Asp	Gly	Asp	Ala	Leu	Lys	Lys	His	Thr
	450					455					460			Asn
Phe	Asn	Ile	Ala	Gly	Ala	Phe	Asp	Pro	Asn	Val	Arg	Lys	Leu	Asp
465					470					475				Gly
Ala	Ile	Lys	Arg	Leu	Glu	Lys	Lys	Val	Ala	Ser	Gly	Met	Ser	Tyr
			485						490					Phe
Ile	Thr	Gln	Pro	Val	Tyr	Ser	Lys	Glu	Lys	Ile	Ile	Gln	Val	Tyr
		500						505				510		Glu
Glu	Thr	Lys	His	Leu	Asn	Thr	Pro	Phe	Phe	Ile	Gly	Ile	Met	Pro

145

<210> 7033

<211> 457

<212> PRT

<213> S.epidermidis

<400> 7033

```

Arg Val Ile Ser Val Arg Arg Ile Met Met Thr Lys Lys Tyr Asp Leu
1      5      10      15
Ile Val Ile Gly Thr Gly Ser Ala Gly Ser Ile Thr Ala Ala Lys Cys
20      25      30
Asn Lys Ala Gly Trp Asn Val Ala Met Val Asp Asp Arg Pro Phe Gly
35      40      45
Gly Thr Cys Ala Leu Arg Gly Cys Asp Pro Lys Lys Val Leu His Gly
50      55      60
Ala Ala Glu Leu Ile Asp Trp Asn Lys Arg Met Val Lys Asn Gly Val
65      70      75      80
Pro Ser Glu Val Ser Ile Asn Trp Lys Asp Leu Met Asn Phe Lys Arg
85      90      95
Thr Phe Thr Asp Asp Val Pro Glu Lys Lys Glu Glu Ala Leu Asn Lys
100     105     110
Gln Gly Ile Asp Thr Tyr His Gly Asn Ala Ser Phe Val Ser Glu Asp
115     120     125
Lys Leu Glu Val Asn Lys Glu Val Leu Glu Gly Ser His Phe Leu Ile
130     135     140
Ala Ser Gly Ala Lys Pro Thr Pro Leu Pro Ile Lys Gly Glu Glu His
145     150     155     160
Leu Thr Tyr Ser Asp Glu Phe Leu Glu Leu Asp Glu Leu Pro Gln Arg
165     170     175
Ile Val Phe Val Gly Gly Gly Tyr Ile Ser Phe Glu Phe Ala His Ile
180     185     190
Ala Ala Arg Ala Gly Ser Glu Val His Ile Ile His Arg Gly Gln Arg
195     200     205
Pro Leu Glu Asn Phe Asp Ile Asp Leu Val Asp Ile Leu Leu Glu Lys
210     215     220
Ser Lys Glu Ile Gly Ile Gln Val His Leu Gln His Ser Val Glu Ser
225     230     235     240
Ile Glu Lys Glu Gln Gly Lys Phe His Val Tyr Ala Arg Lys Lys Glu
245     250     255
Asp Ile Thr Arg Phe Glu Ala Asp Ile Val Ile His Gly Ala Gly Arg
260     265     270
Val Pro Ala Leu Asp Met Asn Leu Glu Lys Gly Asn Ile Glu Arg Lys
275     280     285
Lys His Gly Val His Val Asn Glu Tyr Leu Gln Ser Val Ser Asn Pro
290     295     300
Asn Val Tyr Ala Ala Gly Asp Ala Ala Ala Thr Asp Gly Leu Pro Leu
305     310     315     320
Thr Pro Val Ala Ser Ala Asp Ser His Val Val Ala Ser Asn Leu Leu
325     330     335
Lys Gly Asn Ser Lys Lys Ile Glu Tyr Pro Val Ile Pro Ser Ala Val
340     345     350
Phe Thr Val Pro Lys Met Ala Ser Val Gly Met Ser Glu Glu Glu Ala
355     360     365
Lys Asn Ser Gly Arg Asn Ile Lys Val Lys Gln Lys Asn Ile Ser Asp
370     375     380

```

Trp Phe Thr Tyr Lys Arg Thr Asn Glu Asp Phe Ala Ala Phe Lys Val
 385 390 395 400
 Leu Ile Asp Glu Asp Ser Asp Gln Val Val Gly Ala His Leu Ile Ser
 405 410 415
 Asn Glu Ala Asp Glu Leu Ile Asn His Phe Ala Thr Ala Ile Arg Phe
 420 425 430
 Gly Ile Ser Thr Lys Glu Leu Lys Gln Met Ile Phe Ala Tyr Pro Thr
 435 440 445
 Ala Ala Ser Asp Ile Ala His Met Leu
 450 455

<210> 7034
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 7034
 Gln Thr Ser Ser Asn Leu Gly Met Val Asn Tyr Tyr His Gln Ser Ile
 1 5 10 15
 Phe Lys Asp Val Met His Leu Thr Ile Phe Gln Arg Ile Ile Leu Thr
 20 25 30
 His Phe Gly Ile Gln Ser His Asn Ile Thr Glu Ile Ser Ser Lys Asp
 35 40 45
 Met Tyr Leu Lys Ile
 50

<210> 7035
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 7035
 Phe Thr Glu Leu Cys Asp Asn His Ser Cys Leu Phe Ala Ile Asn Thr
 1 5 10 15
 Phe Lys Cys Trp Arg Asp Lys Leu Tyr Asp Lys Leu Arg Leu Ile Tyr
 20 25 30
 Tyr Glu Ser Lys Arg Phe Asn Phe Leu Glu Ile Tyr
 35 40

<210> 7036
 <211> 64
 <212> PRT
 <213> S.epidermidis

<400> 7036
 Ser Cys Cys Pro Ser Ile Phe Lys Pro Ala Val Gly Pro Ser Val Glu
 1 5 10 15
 Ser Leu Ala Gly Glu Pro Glu Ser Pro Lys Ala Leu Ala Val Pro Ile
 20 25 30
 Lys Ala Ile Arg Ala Ile Val Ser Lys Pro Ile Asp Ala Pro Lys Gly
 35 40 45
 Ile Asn Asn Glu Ala Ile Ile Gly Ile Phe Ala Lys Val Phe Thr Thr
 50 55 60

<210> 7037
 <211> 128

<212> PRT

<213> S.epidermidis

<400> 7037

```

Tyr Arg Met Leu Tyr Arg Phe Ser His Lys Thr Gly Val Tyr Gly Val
1           5           10           15
Ser Val Lys Glu Glu Thr Gly Asn Gln Ile Leu Val Gln Ile Glu Gln
          20           25           30
Val Ile Lys His Pro Lys Gln Gly Asp Leu His His Pro Asn Glu Thr
          35           40           45
Glu Gly Val Phe Phe His Glu Arg Lys Ala Leu Ser His Phe Glu Lys
          50           55           60
Arg Tyr Ala Thr Pro Ser Gln Leu Arg Asp Phe Asn Val Glu Ala Met
65           70           75           80
Pro Tyr Glu Asp Ser Leu Gln His Ala Ile Thr His Leu Glu Asn Gln
          85           90           95
Leu Lys Lys Glu Lys Thr Glu Tyr Ser Arg Leu Ser Leu Asn Asn Leu
          100          105          110
Asn Arg Leu Lys Glu Asp Tyr Ala Ile Gln Tyr Lys Arg His Phe Asp
          115          120          125

```

<210> 7038

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7038

```

Ile Lys Lys Pro Val Asn Glu Phe Met Lys Thr His Leu Leu Ala Ile
1           5           10           15
Leu Leu Gly Ile Met Ser Gln Pro Arg Ile Asp Thr Phe Arg Tyr Thr
          20           25           30
Ile Gln Leu Phe Val Phe Ser Arg
          35           40

```

<210> 7039

<211> 47

<212> PRT

<213> S.epidermidis

<400> 7039

```

Leu Val Glu Leu Phe Asp Leu Cys Tyr Asp Met Ser Val Lys Lys Ile
1           5           10           15
Glu Ile Arg Gly Tyr Gln Val Glu Ser Ser Leu Gln Ser Arg Ser Thr
          20           25           30
Tyr Gln Gly Thr Cys Asp Trp Tyr Ser Thr Val Trp Arg Ile Cys
          35           40           45

```

<210> 7040

<211> 97

<212> PRT

<213> S.epidermidis

<400> 7040

```

Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln
1           5           10           15
Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile

```


			20					25				30					
Ser	Arg	His	Val	Asn	Asp	Ile	Ile	Glu	Thr	Ile	Pro	Glu	Thr	Glu	Phe		
		35					40					45					
Asp	Glu	Phe	Arg	His	His	Arg	Gly	Ala	Thr	Ser	Tyr	His	Pro	Lys	Met		
	50					55					60						
Met	Leu	Lys	Val	Val	Leu	Tyr	Ala	Tyr	Thr	Gln	Ser	Val	Phe	Ser	Gly		
65					70					75					80		
Arg	Lys	Ile	Glu	Lys	Leu	Leu	Asn	Asp	Asn	Ile	Arg	Met	Met	Trp	Leu		
				85					90					95			

Ser

<210> 7041
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 7041
 His Phe Val Thr Leu Cys Lys Leu Trp Tyr Tyr Leu Asn Arg Asn Asn
 1 5 10 15
 Tyr Val Leu Lys Ala Glu Gly Arg Phe Asn Ala Leu Asp Asn Tyr Trp
 20 25 30
 Trp Trp Leu Thr Arg Asn His His Cys Thr
 35 40

<210> 7042
 <211> 92
 <212> PRT
 <213> S.epidermidis

<400> 7042
 Val Val Lys Thr Phe Ala Asn Ile Pro Ile Ile Ala Ser Leu Phe Ile
 1 5 10 15
 Pro Phe Gly Ala Ser Ile Gly Leu Asp Thr Met Ala Leu Ile Ala Leu
 20 25 30
 Ile Gly Thr Ala Ser Ala Leu Gly Asp Ser Gly Ser Pro Ala Ser Asp
 35 40 45
 Ser Thr Leu Gly Pro Thr Ala Gly Leu Asn Ile Asp Gly Gln His Asp
 50 55 60
 His Ile Arg Asp Thr Cys Ile Pro Asn Phe Leu Phe Tyr Asn Val Pro
 65 70 75 80
 Leu Met Ile Phe Gly Thr Ile Ala Ala Met Val Leu
 85 90

<210> 7043
 <211> 66
 <212> PRT
 <213> S.epidermidis

<400> 7043
 Cys Gly Tyr His Lys Ile Lys Ser Leu Leu Ile Lys Arg Leu Ile Asp
 1 5 10 15
 Ser Lys Thr Asn Lys Lys Ile Met Lys Asn Tyr Ser Trp Glu Tyr Phe
 20 25 30
 Asn Val Gln Ile Asn Gln Lys Leu Ser Glu Arg Lys Ala Lys Thr Ile
 35 40 45

Tyr Ser Gln Arg Lys Ile Asp Val Glu Ser Val Phe Gly Ile Met Lys
 50 55 60
 Leu Phe
 65

<210> 7044

<211> 503

<212> PRT

<213> S.epidermidis

<400> 7044

Lys Glu Arg Gln Lys Met Ile Glu Ser Asn Leu Leu Val Leu Thr Leu
 1 5 10 15
 Val Ile Pro Ile Leu Thr Ala Ile Leu Ile Phe Ile Gly Lys Arg
 20 25 30
 Pro Ile Ile Lys Arg Tyr Val Ala Leu Val Gly Thr Leu Thr Leu
 35 40 45
 Val Ile Ala Leu Ile Asn Leu Lys Asn Val Leu Arg Asp Gly Pro Ile
 50 55 60
 Lys Val Glu Leu Gly Ser Trp Lys Ala Pro Tyr Ser Ile Val Phe Val
 65 70 75 80
 Val Asp Ile Phe Ser Ala Leu Leu Ile Ile Thr Ser Ile Ile Ile Thr
 85 90 95
 Ile Leu Val Ile Leu Tyr Ser Tyr Arg Ser Ile Gly Leu Asp Arg Glu
 100 105 110
 Arg His Tyr Tyr Tyr Phe Ser Ile Met Phe Met Leu Ile Gly Ile Ile
 115 120 125
 Gly Ser Phe Thr Thr Gly Asp Ile Phe Asn Leu Phe Val Phe Phe Glu
 130 135 140
 Val Phe Leu Met Ser Ser Tyr Cys Leu Leu Val Ile Gly Thr Thr Lys
 145 150 155 160
 Ile Gln Leu Gln Glu Thr Ile Lys Tyr Ile Leu Val Asn Val Val Ser
 165 170 175
 Ser Ser Phe Phe Val Met Gly Val Ala Val Leu Tyr Ser Val Val Gly
 180 185 190
 Thr Leu Asn Leu Ala His Ile Ser Glu Arg Leu Ser Gln Leu Ser Val
 195 200 205
 His Asp Ser Gly Leu Val Asn Ile Val Phe Ile Leu Phe Ile Phe Val
 210 215 220
 Phe Ala Thr Lys Ala Gly Val Phe Pro Met Tyr Val Trp Leu Pro Gly
 225 230 235 240
 Ala Tyr Tyr Ala Pro Pro Val Ala Ile Ile Thr Phe Phe Gly Ala Leu
 245 250 255
 Leu Thr Lys Val Gly Val Tyr Ala Ile Ala Arg Thr Leu Ser Leu Phe
 260 265 270
 Phe Asn Asn Thr Val Ser Phe Ser His Tyr Val Ile Leu Phe Leu Ala
 275 280 285
 Leu Leu Thr Ile Ile Phe Gly Cys Ile Gly Ala Ile Ala Tyr Tyr Asp
 290 295 300
 Thr Lys Lys Ile Ile Leu Tyr Asn Ile Met Ile Ala Val Gly Val Ile
 305 310 315 320
 Leu Val Gly Ile Ala Met Met Asn Glu Ser Gly Met Thr Gly Ala Ile
 325 330 335
 Tyr Tyr Thr Leu His Asp Met Leu Val Lys Ala Ser Leu Phe Leu Leu
 340 345 350
 Ile Gly Val Met Tyr Lys Ile Thr Lys Thr Thr Asp Leu Arg His Phe

355 360 365
 Gly Gly Leu Ile Lys Gly Tyr Pro Ile Leu Gly Trp Thr Phe Phe Ile
 370 375 380
 Ala Ala Leu Ser Leu Ala Gly Ile Pro Pro Phe Ser Gly Phe Tyr Gly
 385 390 395 400
 Lys Phe Tyr Ile Val Arg Ala Thr Phe Glu Lys Gly Phe Tyr Leu Ser
 405 410 415
 Gly Ile Ile Val Leu Leu Ser Ser Leu Ile Val Leu Tyr Ser Val Ile
 420 425 430
 Arg Ile Phe Leu Lys Gly Phe Phe Gly Glu Val Glu Gly Tyr Thr Leu
 435 440 445
 Ser Lys Lys Val Asn Val Lys Tyr Leu Thr Thr Ile Ala Val Ala Ser
 450 455 460
 Thr Val Ile Thr Val Ile Phe Gly Leu Ser Ala Asp Thr Leu Phe Pro
 465 470 475 480
 Ile Ile Lys Asp Gly Ala Glu Thr Phe Val Asp Pro Ser Gln Tyr Ile
 485 490 495
 His Ser Val Leu Gly Gly Lys
 500

<210> 7045
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7045
 Lys Ala Lys His Asn Asp His Glu Glu Asn Asn His Gly Ser Val Leu
 1 5 10 15
 Lys Asp Lys Val Ile Leu Leu Ser Ile His Gly His Ser Pro His Leu
 20 25 30
 Ile Asp Phe Ser Val Leu Ile Val Ile
 35 40

<210> 7046
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 7046
 Thr Ser Leu Asn Arg Met Arg Pro Val Ala Ala Lys Ala Leu Ile Lys
 1 5 10 15
 Ala Pro Arg Thr Thr Asn Met Ile Glu Thr Leu Val Thr Ile Val Ala
 20 25 30
 Ile Met Leu Asp His Leu Thr Phe Ile His Lys Phe Arg Lys Asp Cys
 35 40 45
 Ser Ser
 50

<210> 7047
 <211> 130
 <212> PRT
 <213> S.epidermidis

<400> 7047
 Gly Val Ile Lys Leu Asn His His Tyr Lys Val Gly Gln His Ile Lys
 1 5 10 15

Leu	Phe	Cys	Val	Gly	Thr	Pro	Leu	Thr	Ser	Trp	Phe	Met	Ser	Lys	Asn
				85					90					95	
Phe	Phe	Thr	His	Val	Thr	Phe	Asp	Ile	Pro	Leu	Pro	Leu	Leu	Glu	Pro
			100					105					110		
Met	His	Met	Thr	Thr	Ala	Met	Phe	Phe	Asp	Phe	Gly	Val	Leu	Cys	Ala
		115					120					125			
Val	Val	Arg	Thr	Ile	Met	Thr	Ile	Ile	Ile	Ser	Ile	Gly	Glu	Asn	Glu
	130					135					140				

<210> 7050

<211> 808

<212> PRT

<213> S.epidermidis

<400> 7050

Ile	Leu	Lys	Glu	Glu	Asn	Ile	Val	Ser	Leu	Leu	His	Ile	Ala	Val	Leu
1				5					10					15	
Leu	Pro	Leu	Ile	Phe	Ala	Leu	Ile	Ile	Pro	Phe	Leu	Tyr	Arg	Phe	Val
			20					25					30		
Lys	Arg	Ile	His	Leu	Gly	Trp	Phe	Val	Leu	Pro	Val	Pro	Ile	Val	Leu
		35					40					45			
Phe	Ile	Tyr	Phe	Ile	Ser	Leu	Ile	Ser	Met	Thr	Met	Ser	Gly	Asn	Asn
		50				55					60				
Val	Met	Lys	Asn	Leu	Asn	Trp	Met	Pro	His	Ile	Gly	Met	Asn	Phe	Asn
65					70					75					80
Leu	Tyr	Val	Asp	Gly	Leu	Gly	Leu	Leu	Phe	Ser	Leu	Leu	Ile	Thr	Gly
				85					90					95	
Ile	Gly	Ser	Leu	Val	Val	Leu	Tyr	Ser	Ile	Gly	Tyr	Leu	Ser	Lys	Ser
			100					105					110		
Glu	Gln	Leu	Gly	Asn	Phe	Tyr	Cys	Tyr	Leu	Leu	Leu	Phe	Met	Gly	Ala
		115					120					125			
Met	Leu	Gly	Val	Val	Leu	Ser	Asp	Asn	Phe	Ile	Ile	Leu	Tyr	Leu	Phe
	130					135					140				
Trp	Glu	Leu	Thr	Ser	Phe	Ser	Ser	Phe	Leu	Leu	Ile	Ser	Phe	Trp	Arg
145					150					155					160
Glu	Lys	Lys	Ala	Ser	Ile	Tyr	Gly	Ala	Gln	Lys	Ser	Leu	Ile	Ile	Thr
				165				170						175	
Val	Leu	Gly	Gly	Leu	Ser	Met	Leu	Gly	Gly	Ile	Ile	Leu	Leu	Ser	Leu
			180					185					190		
Ala	Thr	Asp	Thr	Phe	Ser	Ile	Gln	Ala	Met	Ile	Ser	Lys	Ala	Ser	Asp
		195					200					205			
Ile	Gln	Asn	Ser	Pro	Phe	Phe	Ile	Leu	Val	Met	Ile	Leu	Phe	Met	Ile
	210					215					220				
Gly	Ala	Phe	Thr	Lys	Ser	Ala	Gln	Val	Pro	Phe	Tyr	Ile	Trp	Leu	Pro
225					230					235					240
Asp	Ala	Met	Glu	Ala	Pro	Thr	Pro	Val	Ser	Ala	Tyr	Leu	His	Ser	Ala
				245					250					255	
Thr	Met	Val	Lys	Ala	Gly	Leu	Tyr	Leu	Ile	Ala	Arg	Ile	Thr	Pro	Ile
			260					265					270		
Phe	Ala	Ile	Ser	Glu	Gly	Trp	Val	Trp	Thr	Ile	Thr	Leu	Val	Gly	Leu
		275					280					285			
Ile	Thr	Leu	Phe	Trp	Ala	Ser	Leu	Asn	Ala	Thr	Lys	Gln	His	Asp	Leu
	290					295					300				
Lys	Gly	Ile	Leu	Ala	Phe	Ser	Thr	Val	Ser	Gln	Leu	Gly	Met	Ile	Met
305					310					315					320
Ser	Met	Leu	Gly	Ile	Gly	Ala	Val	Ser	Tyr	His	Tyr	Gln	Gly	Ala	Asn

Ser Gln Leu Tyr Val Ala Gly Phe Val Ala Ala Ile Phe His Leu Ile
 325 340 345 350
 Asn His Ala Thr Phe Lys Gly Ala Leu Phe Met Ile Thr Gly Gly Ile
 355 360 365
 Asp His Ser Thr Gly Thr Arg Asp Val Lys Lys Leu Gly Gly Leu Leu
 370 375 380
 Thr Ile Met Pro Ile Ser Phe Thr Leu Thr Val Ile Thr Thr Leu Ser
 385 390 395 400
 Met Ala Gly Val Pro Pro Phe Asn Gly Phe Leu Ser Lys Glu Lys Phe
 405 410 415
 Leu Glu Ser Met Ile Asn Val Thr His Leu Asn Leu Met Ser Leu Asn
 420 425 430
 Thr Leu Gly Ile Leu Leu Pro Ile Ile Ala Ile Ile Gly Ser Ile Phe
 435 440 445
 Thr Phe Val Tyr Ser Ile Lys Phe Ile Leu His Ile Phe Phe Gly Ser
 450 455 460
 Tyr Lys Pro Glu Ala Leu Pro Lys Gln Ala His Glu Ser Ser Ile Leu
 465 470 475 480
 Met Leu Ile Ser Pro Ile Ile Leu Thr Ser Leu Val Ile Val Phe Gly
 485 490 495
 Leu Phe Pro Ser Ile Leu Thr Gln Ser Ile Ile Glu Pro Ala Ser Val
 500 505 510
 Ala Val Ser Gln Thr Ser Asn Ile Thr Ala Glu Phe His Leu Phe His
 515 520 525
 Gly Ile Thr Pro Ala Phe Leu Ser Thr Ile Gly Ile Tyr Ile Ile Gly
 530 535 540
 Ile Leu Leu Leu Ile Ser Phe Ser Tyr Trp Val Arg Leu Leu Gln Ala
 545 550 555 560
 His Pro Tyr Gln Leu Thr Leu Asn His Trp Tyr Asp Thr Ser Gly Gln
 565 570 575
 Arg Ile Pro Gly Tyr Ser Glu Asn Ile Thr Asn Ser Tyr Val Thr Gly
 580 585 590
 Phe Ser Arg Asn Asn Leu Val Ile Ile Leu Gly Ile Leu Ile Ala Leu
 595 600 605
 Thr Phe Val Thr Val Ile Ser Val Pro Phe Ser Ile Asp Phe Lys Asn
 610 615 620
 Val Ser His Leu Arg Val Phe Glu Gly Ala Thr Val Leu Phe Leu Leu
 625 630 635 640
 Ile Ala Ser Thr Phe Ile Ile Phe Ala Lys Ser Arg Leu Phe Ser Ile
 645 650 655
 Ile Met Leu Ser Ala Val Gly Tyr Ala Ile Ser Val Leu Phe Ile Phe
 660 665 670
 Phe Lys Ala Pro Asp Leu Ala Leu Thr Gln Phe Val Val Glu Ser Ile
 675 680 685
 Ser Thr Ala Leu Phe Leu Leu Cys Phe Tyr His Leu Pro Asn Leu Asn
 690 695 700
 Arg Tyr Asn Glu Lys Pro Thr Phe Lys Leu Thr Asn Ala Val Ile Ser
 705 710 715 720
 Ile Gly Val Gly Leu Ser Val Ile Ile Leu Gly Leu Ile Gly Tyr Gly
 725 730 735
 Asn Arg His Phe Asp Ser Ile Thr Lys Phe Tyr Gln Glu His Val Phe
 740 745 750
 Asp Leu Ala His Gly Lys Asn Met Val Asn Val Ile Leu Val Asn Phe
 755 760 765
 Arg Gly Met Asp Thr Leu Phe Glu Ser Ser Val Leu Ser Ile Ala Gly

770		775		780
Leu Gly Val Tyr Thr Met	Ile Lys Leu Arg	Leu Lys Gln Lys Asn Gln		
785	790	795		800
Ser Ser Glu Val Asn Asp	His Glu			
	805			

<210> 7051

<211> 62

<212> PRT

<213> S.epidermidis

<220>

<221> UNSURE

<222> (24), (26), (58)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 7051

Cys Gly Val Cys Phe Trp Asn Tyr Glu Ala Ile Leu Ser Phe Thr Arg	
1	5 10 15
Lys Ser Val Arg Gly Ile Asn Xaa Asp Xaa Arg Glu Leu Gly Leu Val	
	20 25 30
Leu Met Thr Leu Asn Ile Arg Lys Val Pro Ala Gln Arg Ala Glu Asn	
	35 40 45
Tyr Lys Lys Ile Ile Lys Lys Lys Ile Xaa Ile Leu Cys Gln	
	50 55 60

<210> 7052

<211> 103

<212> PRT

<213> S.epidermidis

<400> 7052

Lys Gly Arg Arg Glu Ile Met Pro Phe Lys Ile Phe Ile Ile Thr Ala	
1	5 10 15
Leu Ile Ile Val Val Leu Ser Met Leu Ala Met Leu Ile Arg Val Ile	
	20 25 30
Leu Gly Pro Ser Leu Ala Asp Arg Val Val Ala Leu Asp Ala Ile Gly	
	35 40 45
Leu Gln Leu Met Ala Val Ile Ala Leu Phe Ser Ile Leu Leu Asn Ile	
	50 55 60
Lys Tyr Met Leu Val Val Ile Leu Met Val Gly Ile Leu Ala Phe Leu	
65	70 75 80
Gly Thr Ala Val Phe Ser Lys Phe Met Asp Glu Gly Lys Val Ile Lys	
	85 90 95
His Asp Ser Asn Asp Arg His	
	100

<210> 7053

<211> 163

<212> PRT

<213> S.epidermidis

<400> 7053

Glu Val Asn Ser Leu Ala Ile Gln Phe Val Ile Asn Leu Leu Val Ser	
1	5 10 15
Val Ile Trp Leu Leu Val Thr Asn Ser Tyr Thr Leu Asn Asn Phe Val	

65					70					75					80
Gly	Met	Gly	Gly	Glu	Ser	Ile	Tyr	Gly	Ser	Ala	Phe	Glu	Asp	Glu	Phe
				85					90					95	
Ser	Leu	Glu	Ala	Phe	Asn	Leu	Tyr	Gly	Ala	Leu	Ser	Met	Ala	Asn	Ala
			100					105					110		
Gly	Pro	Asn	Thr	Asn	Gly	Ser	Gln	Phe	Phe	Ile	Val	Gln	Met	Lys	Glu
		115					120					125			
Val	Pro	Glu	Asn	Met	Leu	Ser	Gln	Leu	Ala	Asp	Gly	Gly	Trp	Pro	Gln
	130					135					140				
Pro	Ile	Val	Glu	Ala	Tyr	Gly	Glu	Lys	Gly	Gly	Thr	Pro	Trp	Leu	Asp
145					150					155					160
Gln	Lys	His	Thr	Val	Phe	Gly	Gln	Leu	Ile	Glu	Gly	Glu	Ser	Thr	Leu
				165					170					175	
Glu	Asp	Ile	Ala	Asn	Thr	Lys	Val	Gly	Ala	Gln	Asp	Lys	Pro	Val	Tyr
			180					185					190		
Asp	Val	Val	Ile	Glu	Ser	Ile	Asp	Val	Glu	Glu					
		195					200								

<210> 7056

<211> 390

<212> PRT

<213> S.epidermidis

<400> 7056

Lys	Gln	Arg	Gly	Asp	Ser	Met	His	Trp	Thr	Ile	Ile	Gly	Gly	Gly	Leu
1				5					10					15	
Gln	Gly	Thr	Thr	Ile	Ala	Leu	Lys	Leu	Lys	Asn	Glu	Gly	Leu	Lys	Asn
			20					25					30		
Glu	Ala	Leu	Thr	Ile	Ile	Asp	Pro	Tyr	Ser	Ser	Leu	Cys	Glu	Arg	Phe
		35					40					45			
Asn	Ile	Tyr	Thr	Gln	Arg	Ile	Ser	Met	Pro	Tyr	Leu	Arg	Ser	Pro	Phe
	50					55					60				
Val	His	His	Ile	His	Pro	Lys	Pro	Phe	His	Leu	Lys	Gln	Tyr	Ala	Arg
65					70					75					80
Tyr	His	Gln	Tyr	Thr	Ser	Ala	Tyr	Tyr	Gly	Pro	Tyr	Lys	Arg	Pro	Gln
				85					90					95	
Arg	Asp	Met	Phe	Met	His	His	Val	His	Asp	Leu	Ile	His	Gln	Phe	Lys
			100					105					110		
Leu	Asn	Asp	Cys	His	Ile	Gln	Gly	Lys	Val	Glu	Ala	Ile	Asn	Lys	Ser
		115					120					125			
Arg	Gly	Lys	Trp	Cys	Ile	Lys	Leu	Ser	Thr	Gly	Asp	Lys	Met	Ile	Thr
	130					135					140				
Asp	Cys	Val	Val	Ile	Ala	Asn	Gly	Tyr	Thr	Gln	Thr	Pro	Phe	Ile	Pro
145					150					155					160
Glu	Ile	Phe	Arg	Asn	Lys	Ala	Asn	Val	Lys	His	Ile	Phe	Ala	Asp	Asn
				165					170					175	
Tyr	His	Ala	Ser	Leu	Asp	Lys	Asp	Thr	Gln	His	Val	Val	Gly	Ser	Gly
			180					185					190		
Ile	Ser	Ala	Ala	His	Leu	Thr	Leu	Lys	Leu	Leu	Asn	Glu	His	Asn	His
		195					200					205			
Gln	Leu	Val	His	Leu	Trp	Met	Asn	Lys	Asp	Ile	Glu	Ile	His	Asn	Phe
	210					215					220				
Asp	Ala	Asp	Pro	Gly	Trp	Leu	Gly	Pro	Lys	Lys	Leu	Asn	Tyr	Leu	Ala
225					230					235					240
Ser	Ile	Ser	Ser	Ser	Asp	Ala	Arg	Met	Lys	Leu	Ile	Glu	Asp	Glu	Arg
				245					250					255	

His Ser Gly Ser Met Pro Met Glu Leu Phe Leu Arg Leu Lys Lys Tyr
 260 265 270
 Val Gln Ser Gly Arg Leu Val Ile His Thr Ser Gln Ile Asp Asp Val
 275 280 285
 Thr Glu Ser Tyr Ile Ile Ser Ala Gly Lys Tyr Phe Glu Tyr Lys His
 290 295 300
 Ile Leu Leu Ala Thr Gly Phe Tyr Asn Gln Leu Leu Thr Gln Pro Leu
 305 310 315 320
 Ile Lys Asn Leu Ile Gln Asn Glu Gln Ala Pro Leu Asn Gln Ser Gly
 325 330 335
 Tyr Pro Ser Leu Ser Asn Glu Leu Glu Trp Leu Asn Gln Leu Phe Val
 340 345 350
 Ala Gly Gly Leu Ala Asp Leu Glu Leu Gly Pro Phe Ala Arg Asn Ile
 355 360 365
 Met Gly Gly Lys Glu Ser Ala Glu Arg Ile Ser Lys Ala Tyr Lys Arg
 370 375 380
 Leu Asn Lys Lys Ile Ser
 385 390

<210> 7057

<211> 41

<212> PRT

<213> S.epidermidis

<400> 7057

Leu His Thr Ile Leu Ile Ile Cys Leu Gln Ile Ile Tyr Ser Pro Ile
 1 5 10 15
 Ile Lys Met Leu Ser Ile Val Asn Tyr Ile Gln Gln Ile Asn Asn Asn
 20 25 30
 Tyr Leu Lys Phe Phe Ile Phe Pro Tyr
 35 40

<210> 7058

<211> 120

<212> PRT

<213> S.epidermidis

<400> 7058

Ser Ser Met Ile Ala Thr Ile Val Thr Ser Val Ser Ile Ile Phe Val
 1 5 10 15
 Val Leu Gly Ala Leu Ile Ser Ala Phe Ala Ala Thr Gly Leu Ile Arg
 20 25 30
 Leu Arg Asp Val Tyr Ser Arg Ala His Ala Ala Gly Lys Ala Ala Thr
 35 40 45
 Leu Gly Ala Met Phe Leu Leu Phe Gly Ala Phe Leu Tyr Phe Ile Gly
 50 55 60
 Thr Glu Gly Tyr Val Asn Met Gln Leu Ile Ile Gly Ile Ile Phe Val
 65 70 75 80
 Phe Ile Thr Gly Pro Leu Ser Ser His Leu Ile Met Lys Ala Ala Tyr
 85 90 95
 Asn Ile Lys Thr Pro Tyr Thr Lys Asp Thr Lys Ile Asp Glu Ile Lys
 100 105 110
 Glu Asp Met Lys His Thr Lys Leu
 115 120

<210> 7059

<211> 390

<212> PRT

<213> S.epidermidis

<220>

<221> UNSURE

<222> (207)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 7059

His	Ala	Ile	Val	Ile	Thr	Ser	Leu	Asn	Lys	Glu	Ser	Ile	Lys	Asn	Met
1			5						10					15	
Asn	Asn	Lys	Tyr	Glu	Pro	Leu	Phe	Lys	Ser	Leu	Thr	Leu	Pro	Asn	Gly
		20						25					30		
Val	Glu	Val	Arg	Asn	Arg	Phe	Val	Leu	Ala	Pro	Leu	Thr	His	Thr	Ser
		35					40					45			
Ser	Asn	Asp	Asp	Gly	Thr	Ile	Ser	Asp	Ile	Glu	Leu	Pro	Tyr	Ile	Glu
	50					55				60					
Lys	Arg	Ser	Lys	Asp	Val	Gly	Ile	Ala	Ile	Asn	Ala	Ala	Ser	Asn	Val
65				70					75					80	
Asn	Asp	Val	Gly	Lys	Ala	Phe	Pro	Gly	Gln	Pro	Ser	Val	Ala	His	Asp
			85					90					95		
Ser	Asp	Ile	Glu	Gly	Leu	Lys	Glu	Leu	Ala	Gln	Val	Met	Lys	Lys	Asn
		100					105					110			
Gly	Ala	Lys	Ala	Ile	Val	Gln	Ile	His	His	Gly	Gly	Ala	Gln	Ala	Leu
	115					120						125			
Pro	Glu	Leu	Thr	Pro	Asp	Gly	Asp	Val	Val	Ala	Pro	Ser	Ala	Ile	Ser
	130					135					140				
Leu	Lys	Ser	Phe	Gly	Gln	Lys	Glu	His	Asp	Thr	Arg	Glu	Met	Thr	
145				150					155					160	
Ala	Glu	Glu	Ile	Glu	Gln	Thr	Ile	Arg	Asp	Phe	Gly	Glu	Ala	Thr	Arg
			165					170						175	
Arg	Ala	Ile	Glu	Ala	Gly	Phe	Asp	Gly	Val	Asp	Ile	His	Gly	Ala	Asn
		180						185					190		
Gln	Cys	Leu	Ile	Pro	Gln	Phe	Val	Ser	Pro	Tyr	Tyr	Asn	Ile	Xaa	Asn
	195					200						205			
Asp	Val	Trp	Ala	Asp	Asn	Tyr	Lys	Phe	Pro	Val	Ala	Val	Ile	Asp	Glu
	210					215					220				
Val	Val	Lys	Ala	Lys	Lys	Ala	His	Ala	Asn	Asp	Asp	Phe	Ile	Ile	Gly
225				230						235				240	
Tyr	Arg	Leu	Ser	Pro	Glu	Glu	Ala	Glu	Ser	Pro	Gly	Ile	Ser	Met	Glu
			245						250					255	
Ile	Thr	Glu	Glu	Leu	Ile	His	Gln	Ile	Ala	Asn	Lys	Pro	Leu	Asp	Tyr
		260					265						270		
Ile	His	Val	Ser	Leu	Met	Asp	Val	Asn	Ser	Val	Thr	Arg	Glu	Gly	Lys
	275					280						285			
Tyr	Lys	Gly	Glu	Asn	Arg	Leu	Glu	Leu	Ile	His	Gln	Trp	Ile	Asn	Gly
	290					295					300				
Arg	Met	Pro	Leu	Ile	Gly	Ile	Gly	Ser	Val	Phe	Thr	Ala	Glu	Asp	Ala
305				310						315				320	
Leu	Asn	Ala	Val	Glu	Asn	Ile	Gly	Val	Glu	Phe	Val	Ala	Leu	Gly	Arg
			325						330					335	
Glu	Ile	Leu	Leu	Asp	Tyr	Asp	Phe	Val	Ala	Lys	Ile	Lys	Glu	Gly	Arg
		340					345						350		
Glu	Asp	Glu	Ile	Ile	Asn	Ala	Phe	Asp	Pro	Asn	Arg	Glu	Asp	Gln	His
	355					360						365			

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365

Tyr Leu Thr Pro Asn Leu Trp Glu Gln Phe Asn Gln Gly Phe Tyr Pro
 370 375 380
 Leu Pro Arg Lys Asp Lys
 385 390

<210> 7060
 <211> 60
 <212> PRT
 <213> S.epidermidis

<400> 7060
 Phe Cys Leu Leu Val Phe Ile Lys Leu Tyr Glu Arg Pro Tyr Phe Phe
 1 5 10 15
 Lys Tyr Phe Ile Val Lys Leu His Ile Asn Thr Lys Tyr Phe Gly Glu
 20 25 30
 Thr Leu Glu Gly Ala Gly Gln Val Glu Asp Tyr Arg Leu Lys Leu Ser
 35 40 45
 Leu Arg Lys Arg Ala Asn Asn Thr Arg Tyr Cys Lys
 50 55 60

<210> 7061
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 7061
 Lys Ile Cys Ser Ser Ile Ser Leu Phe Tyr Asp Phe Ser Thr Leu Asn
 1 5 10 15
 Lys Ala Ser Lys Ile Met Phe Tyr Glu Leu Ile Phe Ile Phe Lys Tyr
 20 25 30
 Asn Ser Cys Thr Phe Ile Asn Lys Leu Cys Ser Ile Asn Phe Asp Arg
 35 40 45
 Leu Ser Gln Thr Lys Ser
 50

<210> 7062
 <211> 166
 <212> PRT
 <213> S.epidermidis

<400> 7062
 Trp Leu Cys Ser Arg Ile Leu Ile Lys Leu Phe Leu Asn Lys Asn Arg
 1 5 10 15
 Lys Glu Glu Tyr Ile Met Asn Thr Lys Tyr Leu Leu Ala Val Gly Ala
 20 25 30
 Ile Val Thr Ser Leu Thr Leu Gly Ala Cys Gly Asn Ser Asn Ser Glu
 35 40 45
 Ser Asp His Ala Asn His Lys Asp Lys Gln Gln Glu Asp Ser Asn Val
 50 55 60
 Lys Thr Asp Thr Thr Lys Lys Leu Ser Gly Asn Phe Glu Ser Lys Asn
 65 70 75 80
 Gly Glu Lys Val Glu Gly Lys Ala Lys Ile Glu Asn Gly Lys Leu Met
 85 90 95
 Leu Glu Asn Tyr Lys Ser Ser Lys Gly Pro Asp Leu Tyr Val Tyr Leu
 100 105 110
 Thr Lys Asn Gly Asp Ile Lys Ser Gly Lys Lys Ile Ser Thr Val Asp

210		215		220
Tyr Ile Ala Gln Ile Tyr Ile Glu Asp Glu Arg Phe Val Lys Phe Ile				
225		230		235
Asn Lys Gln Arg Glu Arg Gly Leu Asn Leu Tyr Ile Ser Asp Ala Ile				240
	245		250	255
Lys Thr Phe Ile Lys Leu				
	260			

<210> 7065
 <211> 77
 <212> PRT
 <213> S.epidermidis

<400> 7065

Gly Phe Thr Ser Ile Tyr Val Val Ser Arg Leu Gly Asn Thr Tyr Leu	
1	5 10 15
Asn His His Asp Ser Ile Ser Asp Asn Tyr Met Leu Arg Pro Ser His	
	20 25 30
Arg Asp Thr Pro Arg Lys Lys Cys Asp Trp Leu His Ser Ile Ile Asn	
	35 40 45
Leu Leu Leu Tyr Val Lys His Met Pro Ile Leu Tyr Cys Arg Gln Asn	
	50 55 60
Asn Phe Phe Ile Gln Pro Met Thr Asn His Leu Lys Ala	
65	70 75

<210> 7066
 <211> 57
 <212> PRT
 <213> S.epidermidis

<400> 7066

Pro Phe Asn Ser Ile Ser Cys Ala Pro Ile Asn Gly Pro Asn Lys Lys	
1	5 10 15
Pro Ser Glu Asn Ile Glu Arg Lys Thr Val Leu Ala Asn Leu Ala Arg	
	20 25 30
Ser Arg Glu Leu Glu Ala Leu Ile Asp Ser Leu Ala Glu Ala Tyr Asn	
	35 40 45
Cys Gly Ile Ala Gly Ala Asn Asn Pro	
50	55

<210> 7067
 <211> 171
 <212> PRT
 <213> S.epidermidis

<400> 7067

Ser Asn Gly Ser Lys Tyr Ser Lys Glu Ser Ser Lys Ser Ser Phe Lys	
1	5 10 15
Ser Ser Phe Thr Lys Arg Phe Val Thr Ser Cys Cys Gly Phe Ser Asn	
	20 25 30
Thr Leu Leu Thr Ala Pro Cys Ser Ile Thr Leu Pro Phe Ser Ile Thr	
	35 40 45
Ala Thr Ser Ser Gln Ile Leu Arg Ile Thr Cys Ile Ser Cys Val Ile	
	50 55 60
Ser Thr Ile Val Lys Phe Cys Cys Ser Leu Thr Phe Asn Asn Lys Ser	
65	70 75 80

Arg Ile Ser Ser Val Val Cys Gly Ser Asn Ala Leu Val Ala Ser Ser
 85 90 95
 His Asn Asn Thr Ser Gly Ser Leu Ala Asn Ala Leu Ala Ile Pro Thr
 100 105 110
 Leu Cys Phe Cys Pro Pro Asp Asn Ser Asp Gly Tyr Ala Leu Ser Arg
 115 120 125
 Pro Phe Arg Pro Thr Ser Ser Met Ser Ser Asn Ala Phe Cys Leu Ala
 130 135 140
 Arg Pro Leu Gly Thr Pro Ala Ile Ser Asn Gly Asn Val Thr Phe Phe
 145 150 155 160
 Asn Thr Phe Leu Asp His Ser Arg Leu Lys Cys
 165 170

<210> 7068

<211> 53

<212> PRT

<213> S.epidermidis

<400> 7068

Lys Tyr Leu Ser Leu His Thr Lys His Met Arg Glu Ile Phe Ile Pro
 1 5 10 15
 Lys Ile Leu Ser Met Gly Thr Ile Ile His Thr Leu Leu Cys Asn Val
 20 25 30
 Asn His Lys Phe Ser Phe Phe Tyr Ile Gln Ile Val Phe Asn Ser His
 35 40 45
 Phe Leu Leu Phe Phe
 50

<210> 7069

<211> 227

<212> PRT

<213> S.epidermidis

<400> 7069

Gly Val Ile Ser Met Ser Gln Asn Asp Leu Asn Lys Glu Lys Ala Leu
 1 5 10 15
 Val Val Phe Ser Gly Gly Gln Asp Ser Thr Thr Cys Leu Phe Tyr Ala
 20 25 30
 Lys Lys His Phe Lys Glu Val Glu Leu Val Thr Phe Asn Tyr Gly Gln
 35 40 45
 Arg His Asp Lys Glu Ile Glu Val Ala Lys Lys Ile Ala Lys Glu Gln
 50 55 60
 Asn Leu Lys His His Ile Leu Asp Met Ser Leu Leu Ser Gln Leu Thr
 65 70 75 80
 Pro Asn Ala Leu Thr Gln His Glu Leu Ser Ile Glu Asp Asn Asp Asp
 85 90 95
 Gly Ile Pro Asn Thr Phe Val Pro Ala Arg Asn Leu Leu Phe Leu Ser
 100 105 110
 Phe Ala Gly Ala Leu Ala Tyr Gln Ile His Ala Lys His Ile Ile Thr
 115 120 125
 Gly Val Cys Glu Thr Asp Phe Ser Gly Tyr Pro Asp Cys Arg Asp Ser
 130 135 140
 Phe Ile Lys Ser Met Asn Val Thr Leu Ser Leu Ser Met Asp Lys Asp
 145 150 155 160
 Phe Val Ile His Thr Pro Leu Met Trp Leu Asp Lys Ala Gln Thr Trp
 165 170 175

Ala Leu Ser Asp Lys Leu Gly Val Leu Asp Tyr Ile Arg His Asn Thr
 180 185 190
 Leu Thr Cys Tyr Asn Gly Ile Ile Gly Asp Gly Cys Gly Glu Cys Pro
 195 200 205
 Ala Cys His Leu Arg Ala Arg Gly Leu Lys His Tyr Leu Glu His Lys
 210 215 220
 Gly Glu Glu
 225

<210> 7070
 <211> 66
 <212> PRT
 <213> S.epidermidis

<400> 7070
 Gly Gly Ile Ser Met Ser Leu His Phe Gln Ile Leu Leu Trp Leu Ser
 1 5 10 15
 Ile Leu Phe Ile Ile Ala Gly Thr Ile Leu Leu Val Thr Met Leu Lys
 20 25 30
 Thr Lys Lys Glu Glu Arg Lys Glu Ser Tyr Leu Gly Phe Thr Val Ile
 35 40 45
 Phe Leu Ile Phe Gly Phe Ala Ile Leu Ile Tyr Thr Phe Ile Phe Gly
 50 55 60
 Ile Leu
 65

<210> 7071
 <211> 66
 <212> PRT
 <213> S.epidermidis

<400> 7071
 Ile Gln Thr Ser Ser Trp Leu Asn Ile Arg Lys Val Thr Ala Gln Arg
 1 5 10 15
 Ala Glu Asn His Gln Lys Asn Tyr Lys Lys Asp Asn Phe Tyr Ile Ile
 20 25 30
 Ser Ile Glu Ile Val Phe Ile Tyr Leu Ser Trp Asn Phe Met Ser Gln
 35 40 45
 Pro Leu Ile Phe Ile Leu Met Ser Leu Val Ile Ile Leu Lys Leu Glu
 50 55 60
 Tyr Leu
 65

<210> 7072
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 7072
 Ile Gln Thr Ser Leu Trp Leu Asn Ile Arg Lys Val Thr Ala Gln Arg
 1 5 10 15
 Ala Glu Asn Asn Gln Lys Asn Tyr Lys Lys Asp Asn Phe Tyr Ile Phe
 20 25 30
 Ser Ile Glu Ile Val Phe Phe Thr Tyr Leu Glu Pro Phe Cys Pro Ser
 35 40 45
 Leu Lys Lys Pro Pro Thr Ile

50

55

<210> 7073
 <211> 156
 <212> PRT
 <213> S.epidermidis

<400> 7073

Gly	Ile	Lys	Ser	Phe	Leu	Thr	Met	Lys	Thr	Asn	Val	Ile	Ile	Asp	Gly
1				5					10					15	
Asp	Ala	Cys	Pro	Val	Val	Asn	Ser	Val	Ile	Glu	Leu	Thr	Lys	Gly	Thr
			20					25					30		
Gly	Ile	Phe	Val	Thr	Ile	Leu	Arg	Ser	Phe	Ser	His	Phe	Ser	Gln	Gln
		35					40					45			
Ile	Gln	Pro	Glu	His	Val	Lys	Ile	Val	Tyr	Val	Asp	Asp	Gly	Pro	Asp
	50					55					60				
Ala	Val	Asp	Tyr	Lys	Ile	Val	Glu	Leu	Ala	Ser	Asn	Asn	Asp	Ile	Val
65					70				75					80	
Ile	Thr	Gln	Asp	Tyr	Gly	Leu	Ala	Ser	Leu	Leu	Ile	Asp	Lys	Val	His
			85					90					95		
Thr	Val	Met	His	His	Lys	Gly	Asn	Ile	Tyr	His	Ser	Asn	Asn	Ile	Gln
			100				105						110		
Ser	Leu	Leu	Asn	Gln	Arg	Tyr	Leu	Asn	Ala	Gln	Ile	Arg	Arg	Arg	Gly
		115					120					125			
Gly	Arg	His	Lys	Gly	Pro	Pro	Pro	Phe	Thr	Thr	Glu	Asp	Arg	Leu	Lys
	130					135					140				
Phe	Glu	His	Ala	Phe	Arg	Lys	Ile	Ile	Asn	Gln	Ile				
145					150					155					

<210> 7074
 <211> 69
 <212> PRT
 <213> S.epidermidis

<400> 7074

Asn	Gln	Met	Ser	Phe	Tyr	Asp	Phe	Ile	Leu	Gly	Phe	Ile	Asn	Asp	Asp
1				5					10					15	
Thr	Pro	Leu	Gly	His	Leu	Ala	Gln	Tyr	Ile	Phe	Asn	Asp	Ala	Cys	Phe
			20					25					30		
Pro	Lys	Glu	Glu	Lys	Asn	Asn	Asn	Ser	Ile	Arg	Thr	Tyr	Val	Leu	Leu
		35				40						45			
Asn	Tyr	Asn	Asp	Arg	Gln	Leu	Ile	Glu	Ser	Thr	Asn	Arg	Ala	Ile	Ser
	50					55					60				
Leu	Tyr	Gln	Leu	Ile											
65															

<210> 7075
 <211> 90
 <212> PRT
 <213> S.epidermidis

<400> 7075

Ile	Lys	Ser	Ser	Cys	Asn	Phe	Ser	Leu	Leu	Ile	Gly	Ser	Arg	Ala	Leu
1				5					10					15	
Lys	Gly	Ser	Ser	Met	Ile	Ile	Thr	Gly	Gly	Ser	Ala	Ala	Asn	Ala	Arg
			20					25					30		

3190

Thr	Thr	Pro	Thr	Leu	Cys	Arg	Cys	Pro	Pro	Asp	Ser	Ser	Ser	Gly	Phe
		35					40					45			
Leu	Phe	Leu	Asn	Cys	Ser	Gly	Phe	Lys	Pro	Thr	Ile	Val	Asn	Asn	Ser
	50					55					60				
Ser	Thr	Arg	Lys	Ser	Ile	Ser	Leu	Ser	Phe	His	Phe	Phe	Ile	Trp	Gly
65					70					75					80
Thr	Cys	Ala	Met	Phe	Ser	Leu	Ile	Val	Ile						
				85					90						

<210> 7076

<211> 91

<212> PRT

<213> S.epidermidis

<400> 7076

Phe	Thr	Thr	Leu	Ser	Cys	Tyr	Tyr	Ser	Ala	Leu	Val	Thr	Val	Ala	Ser
1				5					10					15	
Ile	Gln	Thr	Val	Gly	Ile	Ile	Leu	Val	Val	Ala	Leu	Leu	Ile	Thr	Pro
			20					25					30		
Ala	Ser	Thr	Ala	Phe	Leu	Ile	Ser	Lys	Gln	Leu	Tyr	Ala	Met	Met	Val
			35					40				45			
Ile	Ala	Ser	Ile	Ile	Ser	Val	Ile	Ser	Ser	Ile	Ile	Gly	Leu	Asn	Phe
			50			55					60				
Ser	Tyr	Ile	Tyr	Asn	Ile	Pro	Ser	Gly	Ser	Asn	Tyr	Cys	Tyr	Leu	Tyr
65				70						75					80
Leu	Tyr	Asp	Leu	Tyr	Cys	Asn	Ala	Ile	Ser	Tyr					
				85					90						

<210> 7077

<211> 342

<212> PRT

<213> S.epidermidis

<400> 7077

Leu	Arg	Glu	Ser	Leu	Phe	Met	Ser	Tyr	Ile	Leu	Ile	Val	Thr	Ile	Ala
1				5					10					15	
Ile	Val	Ile	Phe	Ser	Leu	Ile	Phe	Asp	Phe	Ile	Asn	Gly	Phe	His	Asp
			20					25					30		
Thr	Ala	Asn	Ala	Val	Ala	Thr	Ala	Val	Ser	Thr	Arg	Ala	Leu	Thr	Pro
			35					40				45			
Arg	Arg	Ala	Ile	Leu	Leu	Ala	Ala	Val	Met	Asn	Phe	Ile	Gly	Ala	Leu
			50			55					60				
Thr	Phe	Thr	Gly	Val	Ala	Gly	Thr	Ile	Thr	Lys	Asp	Ile	Val	Asp	Pro
65				70						75					80
Phe	Lys	Leu	Gln	His	Gly	Leu	Val	Val	Val	Leu	Ala	Ala	Ile	Ile	Ala
				85					90					95	
Ala	Ile	Ile	Trp	Asn	Leu	Ile	Thr	Trp	Leu	Tyr	Gly	Ile	Pro	Ser	Ser
			100					105					110		
Ser	Ser	His	Ala	Leu	Ile	Gly	Ser	Ile	Ala	Gly	Ala	Ala	Ile	Ala	Ser
			115				120					125			
Gln	Gly	Ser	Phe	Ala	Val	Leu	His	Tyr	Gln	Gly	Phe	Thr	Lys	Ile	Ile
			130			135					140				
Ile	Val	Leu	Ile	Ile	Ser	Pro	Ile	Ile	Ala	Phe	Cys	Val	Gly	Tyr	Met
145					150					155					160
Met	Tyr	Thr	Ile	Val	Lys	Ile	Val	Phe	Lys	Asn	Ser	Asn	Leu	Thr	Arg
				165					170					175	

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2014. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

Thr Asn Arg Asn Phe Arg Phe Phe Gln Ile Phe Thr Ala Ala Leu Gln
 180 185 190
 Ser Phe Ser His Gly Thr Asn Asp Ala Gln Lys Ser Met Gly Ile Ile
 195 200 205
 Thr Leu Ala Leu Ile Val Gly Asn Leu Gln Asp Gly Ser Asn Val Glu
 210 215 220
 Pro Gln Val Trp Val Lys Val Ala Cys Ala Thr Ala Met Gly Leu Gly
 225 230 235 240
 Thr Ala Val Gly Gly Trp Lys Ile Ile Lys Thr Val Gly Gly Asn Ile
 245 250 255
 Met Lys Ile Arg Pro Ala Asn Gly Ala Ala Ala Asp Ile Ser Ser Ala
 260 265 270
 Leu Thr Ile Phe Val Ala Ser Ser Leu His Phe Pro Leu Ser Thr Thr
 275 280 285
 His Val Val Ser Ser Ser Ile Leu Gly Val Gly Ala Ser Asn Arg Ala
 290 295 300
 Lys Gly Val Lys Trp Ser Thr Ala Gln Arg Met Val Val Thr Trp Val
 305 310 315 320
 Ile Thr Leu Pro Ile Ser Ala Val Leu Ala Ala Ile Ile Tyr Phe Ile
 325 330 335
 Ile His Leu Phe Leu Lys
 340

<210> 7078
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 7078
 Gln Phe Thr Phe Thr His Phe Phe Phe Val Ala Cys His Phe Leu Lys
 1 5 10 15
 Ser Pro Pro Ile Ile Ile Phe Asn Gln Tyr His Tyr Ile Lys Phe Ile
 20 25 30
 Leu Ser His Ser Asn Met Gln Ser Asn Ile Leu Ile Leu
 35 40 45

<210> 7079
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 7079
 Ala Pro Thr Phe Val Ile Asn Ala Ala Asn Asn Ala Ala Ser Ser Val
 1 5 10 15
 Leu Ser Thr Ala Tyr Ala Leu Gly Asn His Met Lys Ile Thr Ser Ala
 20 25 30
 Ala Phe Glu Leu Lys Ala Thr Arg Asn Thr Lys Asp Ile Ile Val Ile
 35 40 45
 Val Trp Leu Phe Ser Ile
 50

<210> 7080
 <211> 82
 <212> PRT
 <213> S.epidermidis

Gln Met Thr Val Gly Met Asp Leu Gly Lys Val Gly Ala Ser Phe Leu
 50 55 60
 Gly Ser Leu Ile Leu Gly Leu Met Ser His Thr Met Ser Arg Arg Tyr
 65 70 75 80
 Lys Gln Pro Val Ile Ile Phe Ile Val Pro Gly Ile Ile Pro Leu Val
 85 90 95
 Pro Gly Gly Ala Ala Tyr Glu Ala Thr Arg Phe Leu Val Ser Asn Asp
 100 105 110
 Tyr Thr Asn Ala Val Asn Thr Phe Leu Glu Val Thr Leu Ile Ser Gly
 115 120 125
 Ala Ile Ala Phe Gly Ile Leu Val Ser Glu Ile Val Tyr Tyr Ile Tyr
 130 135 140
 Ser Arg Ile Lys Gln Ser Tyr Gly Lys Ile Lys Gly Lys Thr Tyr Lys
 145 150 155 160
 Lys Ser Tyr Asn Met Asn Asn Arg Val
 165

<210> 7084

<211> 312

<212> PRT

<213> S.epidermidis

<400> 7084

Glu Arg Met Phe Lys Thr Leu Asn Lys Asn Asp Ile Leu Arg Gly Leu
 1 5 10 15
 Glu Ser Ile Leu Pro Lys Asp Ile Ile Lys Val Asp Glu Pro Leu Lys
 20 25 30
 Arg Tyr Thr Tyr Thr Glu Thr Gly Gly Glu Ala Asp Phe Tyr Leu Ser
 35 40 45
 Pro Thr Lys Asn Glu Glu Val Gln Ala Ile Val Lys Phe Ala His Glu
 50 55 60
 Asn Ser Ile Pro Val Thr Tyr Leu Gly Asn Gly Ser Asn Ile Ile Ile
 65 70 75 80
 Arg Glu Gly Gly Ile Arg Gly Ile Val Leu Ser Leu Leu Ser Leu Asn
 85 90 95
 His Ile Glu Thr Ser Asp Asp Ala Ile Ile Ala Gly Ser Gly Ala Ala
 100 105 110
 Ile Ile Asp Val Ser Asn Val Ala Arg Asp His Val Leu Thr Gly Leu
 115 120 125
 Glu Phe Ala Cys Gly Ile Pro Gly Ser Ile Gly Gly Ala Val Phe Met
 130 135 140
 Asn Ala Gly Ala Tyr Gly Gly Glu Val Lys Asp Cys Ile Asp Tyr Ala
 145 150 155 160
 Leu Cys Val Asn Glu Lys Gly Asp Leu Leu Lys Leu Thr Thr Ala Glu
 165 170 175
 Leu Glu Leu Asp Tyr Arg Asn Ser Val Val Gln Gln Lys His Leu Val
 180 185 190
 Val Leu Glu Ala Ala Phe Thr Leu Glu Pro Gly Lys Leu Asp Glu Ile
 195 200 205
 Gln Ala Lys Met Asp Asp Leu Thr Glu Arg Arg Glu Ser Lys Gln Pro
 210 215 220
 Leu Glu Phe Pro Ser Cys Gly Ser Val Phe Gln Arg Pro Pro Gly His
 225 230 235 240
 Phe Ala Gly Lys Leu Ile Gln Asp Ser Asn Leu Gln Gly Tyr Arg Ile
 245 250 255
 Gly Gly Val Glu Val Ser Thr Lys His Ala Gly Phe Met Val Asn Val

			180					185					190				
Arg	Gln	Thr	Leu	Ala	Asp	Leu	Ser	Ser	Gln	Glu	Val	Ala	Asp	Ala	Thr		
			195					200					205				
Arg	Ile	Gln	Tyr	Gly	Gly	Ser	Val	Lys	Pro	Asn	Asn	Ile	Lys	Glu	Tyr		
		210				215					220						
Met	Ala	Gln	Ser	Asp	Ile	Asp	Gly	Ala	Leu	Val	Gly	Gly	Ala	Ser	Leu		
225					230					235					240		
Lys	Val	Glu	Asp	Phe	Val	Gln	Leu	Leu	Glu	Gly	Ala	Lys					
				245					250								

<210> 7087

<211> 368

<212> PRT

<213> S.epidermidis

<400> 7087

Met	Lys	Gly	Pro	Ser	Ile	Val	Val	Lys	Gly	Ala	Arg	Ala	His	Asn	Leu		
1				5					10					15			
Lys	Gly	Val	Asp	Ile	Glu	Leu	Pro	Lys	Asn	Lys	Leu	Ile	Val	Met	Thr		
			20					25					30				
Gly	Leu	Ser	Gly	Ser	Gly	Lys	Ser	Ser	Leu	Ala	Phe	Asp	Thr	Ile	Tyr		
		35				40					45						
Ala	Glu	Gly	Gln	Arg	Arg	Tyr	Val	Glu	Ser	Leu	Ser	Ala	Tyr	Ala	Arg		
		50				55					60						
Gln	Phe	Leu	Gly	Gln	Met	Asp	Lys	Pro	Asp	Val	Asp	Thr	Ile	Glu	Gly		
65				70					75					80			
Leu	Ser	Pro	Ala	Ile	Ser	Ile	Asp	Gln	Lys	Thr	Thr	Ser	Lys	Asn	Pro		
			85						90					95			
Arg	Ser	Thr	Val	Ala	Thr	Val	Thr	Glu	Ile	Tyr	Asp	Tyr	Ile	Arg	Leu		
			100					105					110				
Leu	Tyr	Ala	Arg	Val	Gly	Lys	Pro	Tyr	Cys	Pro	Tyr	His	Gly	Ile	Glu		
		115					120					125					
Ile	Glu	Ser	Gln	Thr	Val	Gln	Gln	Met	Val	Asp	Arg	Ile	Leu	Glu	Leu		
	130					135				140							
Glu	Glu	Arg	Thr	Lys	Ile	Gln	Leu	Leu	Ala	Pro	Val	Ile	Ser	His	Arg		
145					150				155					160			
Lys	Gly	Ser	His	Glu	Lys	Leu	Ile	Glu	Asp	Ile	Gly	Lys	Lys	Gly	Tyr		
			165					170					175				
Val	Arg	Leu	Arg	Val	Asp	Asp	Glu	Ile	Val	Asp	Val	Asn	Glu	Val	Pro		
		180					185					190					
Gln	Leu	Asp	Lys	Asn	Lys	Asn	His	Thr	Ile	Glu	Val	Val	Val	Asp	Arg		
	195					200						205					
Leu	Val	Val	Lys	Asp	Gly	Ile	Glu	Thr	Arg	Leu	Ala	Asp	Ser	Ile	Glu		
	210					215					220						
Thr	Ala	Leu	Glu	Leu	Ala	Glu	Gly	Asn	Leu	Thr	Val	Asp	Val	Ile	Asn		
225					230					235					240		
Gly	Glu	Glu	Leu	Lys	Phe	Ser	Glu	Asn	His	Ala	Cys	Pro	Ile	Cys	Gly		
			245					250					255				
Phe	Ser	Ile	Gly	Glu	Leu	Glu	Pro	Arg	Met	Phe	Ser	Phe	Asn	Ser	Pro		
		260						265				270					
Phe	Gly	Ala	Cys	Pro	Thr	Cys	Asp	Gly	Leu	Gly	Gln	Lys	Leu	Lys	Val		
	275						280					285					
Asp	Leu	Asp	Leu	Val	Ile	Pro	Asp	Lys	Asn	Lys	Thr	Leu	Asn	Glu	Gly		
	290					295					300						
Ala	Ile	Glu	Pro	Trp	Glu	Pro	Thr	Ser	Ser	Asp	Phe	Tyr	Pro	Thr	Leu		
305					310					315					320		

Leu Lys Arg Val Cys Glu Val Tyr Lys Ile Asn Met Asp Lys Pro Tyr
 325 330 335
 Lys Lys Leu Thr Asp Arg Gln Lys Asn Ile Leu Met Asn Gly Ser Gly
 340 345 350
 Glu Thr Glu Ile Asp Phe Thr Leu His Ala Thr Lys Trp Cys Tyr Ser
 355 360 365

<210> 7088
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 7088
 Pro Lys Met Pro Cys Ile Asn Val Leu His Lys Asp Leu Phe Val Val
 1 5 10 15
 Lys Arg Leu Glu Ile Asn Val Leu Thr Lys Tyr Arg Lys Asn Thr Leu
 20 25 30
 Thr Tyr Leu Gly Phe Ile Phe Ile Ile Leu Pro Ser Leu Lys Leu Tyr
 35 40 45
 Leu Asn Thr
 50

<210> 7089
 <211> 90
 <212> PRT
 <213> S.epidermidis

<400> 7089
 Gln Gln Val Pro Lys Gly Lys Arg Phe Ala Leu Pro Asn Ala Glu Val
 1 5 10 15
 Met Ile His Gln Pro Leu Gly Gly Ala Gln Gly Gln Ala Thr Glu Ile
 20 25 30
 Glu Ile Ala Ala Asn His Ile Leu Lys Thr Arg Glu Lys Leu Asn Arg
 35 40 45
 Ile Leu Ser Glu Arg Thr Gly Gln Ser Ile Glu Lys Ile Gln Gln Asp
 50 55 60
 Thr Asp Arg Asp Asn Phe Leu Thr Ala Ala Glu Ala Lys Glu Tyr Gly
 65 70 75 80
 Leu Ile Asp Glu Val Met Glu Pro Glu Lys
 85 90

<210> 7090
 <211> 856
 <212> PRT
 <213> S.epidermidis

<400> 7090
 Ala Lys Gln Phe Leu Val Lys Gly Ala Thr Arg Ala Met Gly Phe Leu
 1 5 10 15
 Ser Lys Ile Val Asp Gly Asn Lys Lys Glu Ile Lys Arg Leu Gly Lys
 20 25 30
 Leu Ala Asp Lys Val Leu Ala Leu Glu Glu Asp Thr Ala Ile Leu Thr
 35 40 45
 Asp Glu Glu Ile Arg Glu Lys Thr Lys Ser Phe Gln Lys Glu Leu Ala
 50 55 60
 Glu Ile Glu Asp Val Lys Lys Gln Asn Asp Tyr Leu Asp Lys Ile Leu

65					70					75					80
Pro	Glu	Ala	Tyr	Ala	Leu	Val	Arg	Glu	Gly	Ser	Lys	Arg	Val	Phe	Asn
				85					90					95	
Met	Ile	Pro	Tyr	Lys	Val	Gln	Val	Met	Gly	Gly	Ile	Ala	Ile	His	Lys
			100					105					110		
Gly	Asp	Ile	Ala	Glu	Met	Arg	Thr	Gly	Glu	Gly	Lys	Thr	Leu	Thr	Ala
		115					120					125			
Thr	Met	Pro	Thr	Tyr	Leu	Asn	Ala	Leu	Ala	Gly	Arg	Gly	Val	His	Val
	130					135					140				
Ile	Thr	Val	Asn	Glu	Tyr	Leu	Ser	Ser	Ser	Gln	Ser	Glu	Glu	Met	Ala
145					150					155					160
Glu	Leu	Tyr	Asn	Tyr	Leu	Gly	Leu	Thr	Val	Gly	Leu	Asn	Leu	Asn	Ser
			165						170					175	
Lys	Ser	Thr	Glu	Lys	Arg	Glu	Ala	Tyr	Ala	Gln	Asp	Ile	Thr	Tyr	
			180				185					190			
Ser	Thr	Asn	Asn	Glu	Leu	Gly	Phe	Asp	Tyr	Leu	Arg	Asp	Asn	Met	Val
		195					200					205			
Asn	Tyr	Ala	Glu	Glu	Arg	Val	Met	Arg	Pro	Leu	His	Phe	Ala	Ile	Ile
	210					215					220				
Asp	Glu	Val	Asp	Ser	Ile	Leu	Ile	Asp	Glu	Ala	Arg	Thr	Pro	Leu	Ile
225					230					235					240
Ile	Ser	Gly	Glu	Ala	Glu	Lys	Ser	Thr	Ser	Leu	Tyr	Thr	Gln	Ala	Asn
			245						250					255	
Val	Phe	Ala	Lys	Met	Leu	Lys	Ala	Glu	Asp	Asp	Tyr	Asn	Tyr	Asp	Glu
			260					265					270		
Lys	Thr	Lys	Ala	Val	His	Leu	Thr	Glu	Gln	Gly	Ala	Asp	Lys	Ala	Glu
		275					280					285			
Arg	Met	Phe	Lys	Val	Asp	Asn	Leu	Tyr	Asp	Val	Gln	Asn	Val	Glu	Val
	290					295					300				
Ile	Ser	His	Ile	Asn	Thr	Ala	Leu	Arg	Ala	His	Val	Thr	Leu	Gln	Arg
305					310					315					320
Asp	Val	Asp	Tyr	Met	Val	Val	Asp	Gly	Glu	Val	Leu	Ile	Val	Asp	Gln
				325					330					335	
Phe	Thr	Gly	Arg	Thr	Met	Pro	Gly	Arg	Arg	Phe	Ser	Glu	Gly	Leu	His
			340					345					350		
Gln	Ala	Ile	Glu	Ala	Lys	Glu	Gly	Val	Ala	Ile	Gln	Asn	Glu	Ser	Lys
		355					360					365			
Thr	Met	Ala	Ser	Ile	Thr	Phe	Gln	Asn	Tyr	Phe	Arg	Met	Tyr	Asn	Lys
	370					375					380				
Leu	Ala	Gly	Met	Thr	Gly	Thr	Ala	Lys	Thr	Glu	Glu	Glu	Glu	Phe	Arg
385					390					395					400
Asn	Ile	Tyr	Asn	Met	Thr	Val	Thr	Gln	Ile	Pro	Thr	Asn	Lys	Pro	Val
			405						410					415	
Gln	Arg	Lys	Asp	Asn	Ser	Asp	Leu	Ile	Tyr	Ile	Ser	Gln	Lys	Gly	Lys
			420					425					430		
Phe	Asp	Ala	Val	Val	Glu	Asp	Val	Val	Glu	Lys	His	Lys	Lys	Gly	Gln
	435						440					445			
Pro	Val	Leu	Leu	Gly	Thr	Val	Ala	Val	Glu	Thr	Ser	Glu	Tyr	Ile	Ser
	450					455					460				
Asn	Leu	Leu	Lys	Lys	Arg	Gly	Val	Arg	His	Asp	Val	Leu	Asn	Ala	Lys
465					470					475					480
Asn	His	Glu	Arg	Glu	Ala	Glu	Ile	Val	Ser	Asn	Ala	Gly	Gln	Lys	Gly
			485					490					495		
Ala	Val	Thr	Ile	Ala	Thr	Asn	Met	Ala	Gly	Arg	Gly	Thr	Asp	Ile	Lys
			500					505				510			
Leu	Gly	Asp	Gly	Val	Glu	Glu	Leu	Gly	Gly	Leu	Ala	Val	Ile	Gly	Thr

515 520 525
 Glu Arg His Glu Ser Arg Arg Ile Asp Asp Gln Leu Arg Gly Arg Ser
 530 535 540
 Gly Arg Gln Gly Asp Arg Gly Asp Ser Arg Phe Tyr Leu Ser Leu Gln
 545 550 555 560
 Asp Glu Leu Met Val Arg Phe Gly Ser Glu Arg Leu Gln Lys Met Met
 565 570 575
 Asn Arg Leu Gly Met Asp Asp Ser Thr Pro Ile Glu Ser Lys Met Val
 580 585 590
 Ser Arg Ala Val Glu Ser Ala Gln Lys Arg Val Glu Gly Asn Asn Phe
 595 600 605
 Asp Ala Arg Lys Arg Ile Leu Glu Tyr Asp Glu Val Leu Arg Lys Gln
 610 615 620
 Arg Glu Ile Ile Tyr Asn Glu Arg Asn Glu Ile Ile Asp Ser Glu Glu
 625 630 635 640
 Ser Ser Gln Val Val Asn Ala Met Leu Arg Ser Thr Leu Gln Arg Ala
 645 650 655
 Ile Asn His Phe Ile Asn Glu Glu Asp Asp Asn Pro Asp Tyr Met Pro
 660 665 670
 Phe Ile Asn Tyr Val Asn Asp Val Phe Leu Gln Glu Gly Asp Leu Gln
 675 680 685
 Asp Thr Glu Ile Lys Gly Lys Asp Ser Glu Asp Ile Phe Glu Ile Val
 690 695 700
 Trp Ser Lys Ile Glu Lys Ala Tyr Ala Gln Gln Gln Glu Thr Leu Gly
 705 710 715 720
 Asp Gln Met Ser Glu Phe Glu Arg Met Ile Leu Leu Arg Ser Ile Asp
 725 730 735
 Thr His Trp Thr Asp His Ile Asp Thr Met Asp Gln Leu Arg Gln Gly
 740 745 750
 Ile His Leu Arg Ser Tyr Ala Gln Asn Pro Leu Arg Asp Tyr Gln
 755 760 765
 Asn Glu Gly His Glu Leu Phe Asp Ile Met Met Gln Asn Ile Glu Glu
 770 775 780
 Asp Thr Cys Lys Tyr Ile Leu Lys Ser Val Val Gln Phe Glu Asp Asp
 785 790 795 800
 Val Val Arg Glu Lys Ser Lys Ser Phe Gly Glu Ala Lys His Val Thr
 805 810 815
 Ala Glu Asp Gly Lys Glu Lys Ala Lys Pro Gln Pro Ile Val Lys Gly
 820 825 830
 Asp Gln Val Gly Arg Asn Asp Pro Cys Pro Cys Gly Ser Gly Lys Lys
 835 840 845
 Tyr Lys Asn Cys His Gly Lys Ala
 850 855

<210> 7091

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7091

Ser Leu Lys Phe Ile Glu Thr Phe Ala Thr Ile Phe Leu Tyr Met Ile
 1 5 10 15
 Thr Phe Asp Tyr Thr Phe Leu Phe Ile Leu Ile Pro Glu Lys Ser Phe
 20 25 30
 Ser Lys Met Ile Lys Asn Thr Glu
 35 40

<210> 7092
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 7092
 Gly Val Lys Leu Phe Ser Asn Ser Lys His Thr Leu Lys Leu Ser Tyr
 1 5 10 15
 His Asn Tyr Glu Phe Ala Tyr Asn Tyr Phe Phe Leu Ser Leu Gly Val
 20 25 30
 Lys Arg Ile Val Leu Val Asn Ser Lys Ala Ser Ser
 35 40

<210> 7093
 <211> 250
 <212> PRT
 <213> S.epidermidis

<400> 7093
 Asn Lys Ile Thr Ile Val Tyr Glu Met Arg Asp Arg Met Thr His Val
 1 5 10 15
 Asp Ile Ala Ala Thr Ile Ala Pro Glu Asp Lys Leu Ser Lys Thr Leu
 20 25 30
 Leu Lys Asp Ile Lys Val Asn Glu Glu Ser Ile Asp Ile Ile Glu Leu
 35 40 45
 Arg Ile Asp Gln Trp Pro Ser Phe Asn Lys Ala Leu Leu Asn Glu Val
 50 55 60
 Ile Lys Gln Leu Lys Ile Phe His Leu Lys Ile Leu Val Thr Tyr Arg
 65 70 75 80
 Thr Ser Val Gln Gly Gly Lys Gly Ala Val Asn Glu Gln Glu Tyr Leu
 85 90 95
 Asn Ile Leu Gly Glu Leu Ile Glu Cys Pro Gln Phe Asp Met Ile Asp
 100 105 110
 Ile Glu Trp Ser Ser Ala Val Lys Ile Glu Lys Tyr Thr His Leu Val
 115 120 125
 Gln Arg Ala Gln Gln Lys Gly Leu Glu Val Val Leu Ser His His Asn
 130 135 140
 Phe Gln Glu Thr Pro Ala Leu Asp Glu Leu Lys Phe Ile Tyr Phe Lys
 145 150 155 160
 Met Gln Lys Leu Asn Pro Glu Tyr Leu Lys Leu Ala Val Met Pro Lys
 165 170 175
 Cys Gln Glu Asp Val Leu His Leu Leu Glu Ala Met Ser Leu Thr Ala
 180 185 190
 Lys His Thr Thr Cys Arg Ile Val Gly Ile Ser Met Ser Ser Leu Gly
 195 200 205
 Lys Val Ser Arg Ile Ala Gln Gly Val Phe Gly Gly Thr Leu Ser Tyr
 210 215 220
 Gly Cys Ile Glu Glu Pro Gln Ala Pro Gly Gln Ile His Val Ser Lys
 225 230 235 240
 Leu Lys Ser Met Val Ser Phe Tyr Glu Asp
 245 250

<210> 7094
 <211> 193
 <212> PRT

<213> S.epidermidis

<400> 7094

Gly Glu Ile Thr Met Ile Arg Phe Glu Ile His Gly Asp Asn Leu Thr
 1 5 10 15
 Ile Thr Asp Ala Ile Arg Asn Tyr Ile Glu Glu Lys Val Gly Lys Leu
 20 25 30
 Glu Arg Tyr Phe Asn Asn Val Pro Asn Ala Val Ala His Val Arg Val
 35 40 45
 Lys Thr Tyr Ser Asn Ser Thr Thr Lys Ile Glu Val Thr Ile Pro Leu
 50 55 60
 Lys Asp Val Thr Leu Arg Ala Glu Glu Arg His Asp Asp Leu Tyr Ala
 65 70 75 80
 Gly Ile Asp Leu Ile Thr Asn Lys Leu Glu Arg Gln Val Arg Lys Tyr
 85 90 95
 Lys Thr Arg Val Asn Arg Lys His Arg Asp Arg Gly Asp Gln Asp Ile
 100 105 110
 Phe Val Ala Glu Val Gln Glu Ser Thr Thr Asn Asn His Ala Asp Asp
 115 120 125
 Ile Glu Ser Glu Asn Asp Ile Glu Ile Ile Arg Ser Lys Gln Phe Ser
 130 135 140
 Leu Lys Pro Met Asp Ser Glu Glu Ala Val Leu Gln Met Asn Leu Leu
 145 150 155 160
 Gly His Asp Phe Phe Ile Phe Thr Asp Arg Glu Thr Asp Gly Thr Ser
 165 170 175
 Ile Val Tyr Arg Arg Lys Asp Gly Lys Tyr Gly Leu Ile Glu Thr Thr
 180 185 190
 Glu

<210> 7095

<211> 270

<212> PRT

<213> S.epidermidis

<400> 7095

Gly Gly Val Thr Leu Lys Lys Leu Ala Phe Ala Ile Thr Ala Ala Ser
 1 5 10 15
 Gly Ala Ala Ala Val Leu Ser His His Asp Ala Glu Ala Ser Thr Gln
 20 25 30
 His Lys Val Gln Ser Gly Glu Ser Leu Trp Thr Ile Ala Gln Gln Tyr
 35 40 45
 Asn Thr Ser Val Glu Ser Ile Lys Gln Asn Asn Asn Leu Ser Asn Asn
 50 55 60
 Met Val Phe Pro Gly Gln Val Ile Asn Val Gly Gly Ser Ala Ser Gln
 65 70 75 80
 Asn Thr Ser Ser Asn Thr Ser Ser Ser Ser Ala Ser Ser His Thr Val
 85 90 95
 Val Ala Gly Glu Ser Leu Asn Ile Ile Ala Asn Lys Tyr Gly Val Ser
 100 105 110
 Val Asp Ala Leu Met Gln Ala Asn His Leu Asn Gly Tyr Leu Ile Met
 115 120 125
 Pro Asn Gln Ile Leu Thr Ile Pro Asn Gly Gly Ser Gly Ser Gly Ser
 130 135 140
 Gly Gly Thr Ala Thr Gln Thr Ser Gly Asn Tyr Thr Ser Pro Ser Phe
 145 150 155 160

Asn	His	Gln	Asn	Leu	Tyr	Thr	Glu	Gly	Gln	Cys	Thr	Trp	Tyr	Val	Phe
				165					170					175	
Asp	Lys	Arg	Ser	Gln	Ala	Gly	Lys	Pro	Ile	Ser	Thr	Tyr	Trp	Ser	Asp
			180					185					190		
Ala	Lys	Tyr	Trp	Ala	Ser	Asn	Ala	Ala	Asn	Asp	Gly	Tyr	Gln	Val	Asp
		195					200					205			
Asn	Thr	Pro	Ser	Val	Gly	Ala	Ile	Met	Gln	Ser	Thr	Pro	Gly	Pro	Tyr
	210					215					220				
Gly	His	Val	Ala	Tyr	Val	Glu	Arg	Ile	Asn	Gly	Asp	Gly	Ser	Ile	Leu
225					230					235					240
Ile	Ser	Glu	Met	Asn	Tyr	Ala	Asn	Gly	Pro	Tyr	Asn	Met	Asn	Tyr	Arg
				245					250					255	
Thr	Ile	Pro	Ala	Ser	Glu	Val	Ser	Ser	Tyr	Ala	Phe	Ile	His		
			260					265					270		

<210> 7096

<211> 224

<212> PRT

<213> S.epidermidis

<400> 7096

Met	Asn	Glu	Leu	Gly	Gln	Thr	Ile	Ile	Glu	Asn	Tyr	Asn	Thr	Phe	Ala
1				5					10					15	
Pro	Lys	Asn	Met	Phe	Ser	Glu	Trp	Leu	Lys	Asn	Leu	Leu	Gln	Pro	Leu
			20					25					30		
Ala	Thr	Leu	Ser	Leu	Gly	Phe	Phe	Val	Tyr	Lys	Tyr	Thr	Asp	Asn	Arg
		35				40						45			
His	Lys	Lys	Arg	Leu	Leu	Asn	Glu	Leu	Asp	Ser	Lys	Ser	Glu	Trp	Arg
	50					55					60				
Lys	Thr	Leu	Phe	Ile	Ile	Gly	Gly	Asn	Ser	Thr	Val	Thr	Leu	Asp	Asp
65					70					75					80
Val	Tyr	Gln	Phe	Arg	Thr	Ala	Leu	Arg	Phe	Asn	Phe	Lys	Asn	Asn	Gly
				85					90					95	
Asn	Tyr	Ile	Asp	Lys	Glu	Lys	Ser	Lys	Lys	Glu	Gly	Phe	Ser	Tyr	Phe
			100					105					110		
Phe	Asp	Asn	Met	Asn	Ile	Ile	Ile	Ile	Lys	Tyr	Cys	Ile	Asn	Leu	Ile
		115				120						125			
Glu	Lys	Lys	Gln	Ala	Val	Ser	Asn	Ser	Ile	Asp	Leu	Asp	Ile	Lys	Asp
		130				135					140				
Gln	Asn	Ser	Ile	Arg	Leu	Phe	Cys	Arg	Tyr	Met	Leu	Ala	Asp	His	Trp
145				150						155					160
Glu	Lys	Asn	Gln	Asn	Lys	Asn	Leu	Lys	Phe	Asp	Asp	Pro	Asn	Lys	Glu
			165						170					175	
Glu	Glu	Leu	Cys	Ile	Phe	Thr	Leu	Lys	Glu	Phe	Leu	Lys	Leu	His	Lys
		180						185					190		
Tyr	Tyr	Gln	Asn	Ser	Lys	Asp	Glu	Asp	Ser	Lys	Asn	Lys	Phe	Lys	Ser
		195					200					205			
Leu	Phe	Asp	Glu	Ser	Lys	Glu	Leu	Val	Glu	Lys	Lys	Asp	Thr	Pro	Ser
	210					215					220				

<210> 7097

<211> 183

<212> PRT

<213> S.epidermidis

<400> 7097

<211> 240
 <212> PRT
 <213> S.epidermidis

<400> 7100

Ile	Met	Arg	Thr	Asn	Asp	Lys	Val	Leu	Leu	Glu	Asn	Ile	Asn	Asp	Tyr
1				5					10					15	
Phe	Ser	His	Lys	Gly	Met	Ser	Pro	His	Leu	Ile	Asp	Asp	Ile	Lys	Glu
			20					25					30		
Lys	Tyr	Arg	Gln	Asp	Ile	Lys	Lys	Ser	Glu	Glu	Lys	Asp	Gln	Asp	Tyr
		35				40						45			
Ile	Glu	Tyr	Arg	Gly	Lys	Ser	Pro	Ala	Gln	Leu	Ile	Leu	Thr	Ile	Gln
	50					55					60				
Arg	Asn	Leu	Phe	Ala	Leu	Gln	Leu	Asn	Pro	Met	Ile	Phe	Phe	Ile	Ile
65					70					75					80
Asn	Phe	Ile	Leu	Ile	Ser	Tyr	Leu	Tyr	Asp	Lys	Gln	Tyr	Val	Pro	Phe
				85					90					95	
Gln	Ala	Ile	Thr	Gly	Ile	Ser	Leu	Phe	Tyr	Cys	Leu	Val	Ile	Phe	Pro
			100					105					110		
Ile	Thr	Leu	Ile	Leu	Tyr	Val	Arg	Ile	Ala	Lys	Lys	Asn	Tyr	Leu	Tyr
		115					120					125			
Ser	Asn	Lys	Tyr	Glu	Met	Arg	Thr	Gly	Ile	Ile	Ile	Gly	Ile	Ile	Ala
	130					135						140			
Leu	Ile	Leu	Val	Ile	Met	Gln	Gly	Phe	His	Phe	Asn	Trp	Ala	Ile	Ile
145					150					155					160
Pro	Ile	Ser	Ile	Tyr	Gly	His	Gln	Phe	Val	Phe	Phe	Ala	Gly	Ile	Ile
				165					170					175	
Leu	Ser	Leu	Val	Gly	Ile	Phe	Phe	Lys	Arg	Ile	Glu	Phe	Val	Gly	Val
			180					185					190		
Gly	Leu	Leu	Phe	Cys	Gln	Lys	Thr	Ile	Asp	Ala	Met	Val	Thr	Asp	Pro
		195					200					205			
Glu	Ile	Ala	Gln	Phe	Phe	Ser	Leu	Ala	Ile	Trp	Ile	Ile	Leu	Val	Val
	210					215					220				
Leu	Ile	Ile	Phe	Tyr	Thr	Ile	Arg	Leu	Ser	Glu	Arg	Thr	Lys	Ser	Ser
225					230					235					240

<210> 7101
 <211> 315
 <212> PRT
 <213> S.epidermidis

<400> 7101

Glu	Ser	Trp	Phe	Leu	Ser	Leu	Phe	Phe	Leu	Tyr	Leu	Leu	Gly	Ile	Phe
1				5					10					15	
Val	Gly	Met	Leu	Leu	Pro	Ile	Gln	Thr	Ser	Ile	Asn	Ser	Arg	Leu	Ser
			20					25					30		
Gln	Phe	Thr	Arg	Ser	Ser	Phe	Tyr	Ala	Ser	Thr	Ile	Ser	Phe	Ala	Val
		35				40						45			
Gly	Thr	Ile	Cys	Leu	Leu	Val	Leu	Asn	Ile	Ile	Ile	His	Pro	Gln	Val
	50					55					60				
Leu	Thr	Pro	Glu	Phe	Phe	Ser	Lys	Gln	Thr	Leu	Asn	Tyr	Thr	Trp	Val
65					70					75					80
Leu	Gly	Gly	Leu	Leu	Gly	Val	Ile	Tyr	Leu	Thr	Gly	Asn	Leu	Leu	Leu
				85				90					95		
Leu	Pro	Arg	Leu	Gly	Ala	Ala	Leu	Thr	Val	Val	Ile	Thr	Val	Thr	Gly
			100					105					110		

Gln Ile Ile Met Gly Val Ile Ile Asp Thr Phe Gly Leu Leu Gly Ala
 115 120 125
 His Gln Gln Ser Phe Thr Leu Phe Lys Gly Val Gly Ile Ile Phe Leu
 130 135 140
 Ile Thr Gly Ile Ile Phe Met Asn Tyr Val Arg Arg His Pro Val Asn
 145 150 155 160
 Arg His Lys Asn Thr Pro Ile Val Phe Trp Leu Leu Ile Gly Phe Val
 165 170 175
 Phe Gly Phe Ala Pro Pro Ile Gln Thr Thr Ile Asn Ser Thr Leu Ala
 180 185 190
 Gln His Thr His Ser Ser Ile Phe Ala Ser Leu Ile Ser Phe Ser Val
 195 200 205
 Gly Thr Ile Ala Leu Phe Ile Leu Thr Leu Val Phe Asn Arg Ser Leu
 210 215 220
 Lys Ile Ser Ser Thr His Lys Thr Leu Gly Lys Ile Lys Ser Ile Tyr
 225 230 235 240
 Phe Ile Gly Gly Ile Leu Gly Met Ala Phe Val Thr Ser Asn Ile Ile
 245 250 255
 Leu Met Pro Phe Leu Gly Ala Ala Leu Thr Thr Ile Ile Ala Met Met
 260 265 270
 Gly Gln Met Ile Met Gly Ile Ile Ile Asp His Phe Gly Leu Leu Gly
 275 280 285
 Ser Pro Lys Asn Lys Ile Thr Ser Arg Lys Leu Gly Gly Leu Leu Cys
 290 295 300
 Ile Ala Ile Gly Ile Ile Leu Leu Arg Leu Phe
 305 310 315

<210> 7102

<211> 45

<212> PRT

<213> S.epidermidis

<400> 7102

Asp Ile Ile Thr Arg Leu Arg Phe Phe Leu Tyr Tyr Ser Ser Val Thr
 1 5 10 15
 Lys Val Asn Thr Tyr Val Phe Asn Ser Val Thr His Cys Ile Gly Glu
 20 25 30
 Thr Ile Asn Thr Asn Ser Ile Ser Pro Asn Phe Lys Phe
 35 40 45

<210> 7103

<211> 170

<212> PRT

<213> S.epidermidis

<400> 7103

Trp Glu Val Thr Met Asn Asn Ile Arg Leu Leu Asn Gln Asn Asp Leu
 1 5 10 15
 Asp Ser Tyr Ile Glu Leu Met Lys Phe Gly His His Asn Tyr Glu Trp
 20 25 30
 Asp Arg Tyr Tyr Leu Glu Asn Val Ser Ile Asp Arg Leu Lys Thr Ile
 35 40 45
 Leu Ser Asn His Thr Asp Tyr Trp Asn Ile Phe Gly Ala Phe Glu Asp
 50 55 60
 Asp Glu Leu Val Ala Thr Cys Thr Leu Lys Gln Met Asn Tyr Val Gly
 65 70 75 80

Lys Cys His Lys Ala Ile Leu Glu Asn Asn Phe Val Lys Asn Asn Asp
 85 90 95
 Glu Ile Val Asn Arg Glu Leu Ile Asn His Ile Ile Gln Tyr Ala Lys
 100 105 110
 Glu Gln Asn Ile Glu Thr Leu Met Ile Ala Ile Ala Ser Asn Asn Ile
 115 120 125
 Ser Ala Lys Val Phe Phe Ser Ser Ile Gly Phe Glu Asn Leu Ala Phe
 130 135 140
 Glu Lys Asn Ala Ser Lys Ile Gly Asn Glu Tyr Phe Asp Glu Asn Trp
 145 150 155 160
 Leu Ile Tyr Ser Thr Thr Glu Ser Ser Asp
 165 170

<210> 7104

<211> 58

<212> PRT

<213> S.epidermidis

<400> 7104

Thr Asn Leu Thr Arg Cys Phe Met Cys Lys Glu Tyr Asn Met Thr Gln
 1 5 10 15
 His Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asn Ile
 20 25 30
 Ser Arg His Val Asn Asp Ile Val Glu Thr Ile Pro Asp Thr Glu Phe
 35 40 45
 Asp Glu Phe Ser His His Arg Gly Leu Ile
 50 55

<210> 7105

<211> 58

<212> PRT

<213> S.epidermidis

<400> 7105

Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Glu Tyr Asn Leu Thr Gln
 1 5 10 15
 His Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile
 20 25 30
 Ser Arg His Val Asn Asp Ile Val Glu Thr Ile Pro Asp Thr Glu Phe
 35 40 45
 Asp Glu Phe Arg His His Cys Gly Leu Ile
 50 55

<210> 7106

<211> 60

<212> PRT

<213> S.epidermidis

<400> 7106

Thr Lys Leu Thr Gly Cys Leu Met Tyr Lys Asn Tyr His Met Thr Lys
 1 5 10 15
 His Thr Leu Pro Met Glu Thr Ser Val Ile Ile Ser Thr His Asp Met
 20 25 30
 Ser Gln Tyr Val Asn Asp Ile Val Lys Lys Phe Gln Val Leu Asn Ser
 35 40 45
 Asp Ser Ile Val Ala Gln His Tyr Ser Ile Pro Lys

60

<400> 7107

Ile	Met	Leu	Thr	Glu	Lys	Glu	Gln	Asp	Ile	Ile	Lys	Gln	Thr	Val	Pro
1				5					10					15	
Leu	Leu	Gln	Asp	Lys	Gly	Thr	Glu	Ile	Thr	Ser	Ile	Phe	Tyr	Pro	Lys
			20					25					30		
Met	Phe	Glu	Ala	Asn	Pro	Glu	Leu	Leu	Asn	Met	Phe	Asn	Gln	Thr	Asn
			35				40					45			
Gln	Lys	Lys	Gly	Met	Gln	Ser	Ala	Ala	Leu	Ala	Gln	Ala	Val	Leu	Ala
			50			55					60				
Ala	Ala	Met	Asn	Ile	Asn	Asn	Leu	Gly	Ala	Ile	Lys	Pro	Ala	Ile	Met
65				70						75				80	
Pro	Val	Ala	His	Lys	His	Cys	Ala	Leu	Gln	Val	Tyr	Pro	Glu	His	Tyr
				85					90					95	
Pro	Ile	Val	Gly	Glu	Asn	Leu	Leu	Ala	Ala	Ile	Gln	Asp	Val	Thr	Gly
			100					105					110		
Leu	Glu	Ser	Asp	Asp	Pro	Val	Ile	Gln	Thr	Trp	Ala	Lys	Ala	Tyr	Gly
			115				120					125			
Glu	Ile	Ala	Asp	Val	Phe	Ile	Lys	Leu	Glu	Gln	Glu	Ile	Tyr	Asn	His
			130			135					140				
Met	Leu	Trp	Lys	Gly	Phe	Lys	Pro	Phe	Lys	Ile	Thr	Asn	Ile	Thr	Gln
145				150						155				160	
Glu	Thr	Ser	Asp	Ile	Lys	Ser	Phe	Thr	Val	Glu	Ser	Glu	Glu	Tyr	Asp
				165					170					175	
Leu	Ser	Gln	Phe	Glu	Pro	Gly	Gln	Tyr	Ile	Thr	Val	Asp	Val	Ser	Ser
			180					185					190		
Glu	Lys	Leu	Pro	Tyr	Arg	Ala	Lys	Arg	His	Tyr	Ser	Ile	Ile	Asp	Gly
			195				200					205			
Asp	Glu	Asn	His	Leu	Val	Phe	Gly	Val	Lys	Arg	Asp	Val	Thr	Thr	Glu
						215					220				
His	Glu	Gly	Glu	Val	Ser	Thr	Ile	Leu	His	Asp	Glu	Ile	Ser	Glu	Gly
225				230						235				240	
Asp	Met	Ile	Asn	Leu	Ser	Ala	Pro	Val	Gly	Gly	Phe	Ser	Ile	Glu	Asn
				245					250					255	
Thr	Glu	Arg	Pro	Gln	Leu	Phe	Ile	Gly	Ser	Gly	Val	Gly	Met	Thr	Pro
			260					265					270		
Leu	Val	Ser	Met	Phe	Lys	Lys	Ala	Ala	Ser	Leu	Asn	Val	Pro	Thr	Gln
							280					285			
Met	Ile	Gln	Ala	Val	Val	Thr	Glu	Asp	Glu	Arg	Pro	Phe	Ala	Gln	Lys
						295					300				
Leu	Asp	Ser	Ile	Thr	Asp	Asn	Tyr	Glu	Gln	Ala	Gln	Leu	His	Leu	His
305				310						315				320	
Val	Lys	Asp	Lys	Glu	Gly	Tyr	Leu	Glu	Ala	Lys	Glu	Leu	Glu	Gln	Tyr
				325					330					335	
Leu	Ser	Glu	Gln	Pro	Glu	Ile	Tyr	Ile	Cys	Gly	Gly	Thr	Lys	Phe	Leu
			340					345				350			
His	Ser	Ile	Ile	Asn	Ser	Leu	Lys	Glu							

<210> 7108
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 7108
 Gln Ser Ile Thr Lys Leu Ile Tyr Asp Tyr Phe Lys Phe Phe Arg Thr
 1 5 10 15
 Gln His Arg Glu Phe His Arg Val Asn Ser Thr Gly Lys Ala Gly Trp
 20 25 30
 Gly Ser Gly Phe Arg Thr Trp Gly Asn Glu Phe Asn Leu Lys Phe Asp
 35 40 45
 Thr Cys Thr Gln Leu Ile Lys
 50 55

<210> 7109
 <211> 67
 <212> PRT
 <213> S.epidermidis

<400> 7109
 Ile Phe Val Thr Asn Pro Leu Ile Lys Arg Glu Tyr Ser Ile Lys Ile
 1 5 10 15
 Ile Pro Gln Ser Thr Ser Arg Thr Leu Leu Leu Asn His Tyr Tyr Thr
 20 25 30
 Leu Ile Phe Gly Lys Val Lys Asp Phe Leu Tyr Phe Ile Asn Cys Arg
 35 40 45
 Ala Leu Asn Asn Val Lys Ser Tyr Leu Asn Lys Ala Leu Tyr Arg Leu
 50 55 60
 Ile Val Tyr
 65

<210> 7110
 <211> 253
 <212> PRT
 <213> S.epidermidis

<400> 7110
 Met Ser Ser Thr Leu Glu Ile Lys Asp Leu His Val Ser Ile Glu Asp
 1 5 10 15
 Lys Glu Ile Leu Lys Gly Val Asn Leu Thr Ile Asn Thr Gly Glu Ile
 20 25 30
 His Ala Ile Met Gly Pro Asn Gly Thr Gly Lys Ser Thr Leu Ser Ser
 35 40 45
 Ala Ile Met Gly His Pro Ser Tyr Glu Val Thr Gln Gly Glu Val Leu
 50 55 60
 Leu Asp Gly Val Asn Ile Leu Glu Leu Asp Val Asp Glu Arg Ala Lys
 65 70 75 80
 Ala Gly Leu Phe Leu Ala Met Gln Tyr Pro Ser Glu Ile Thr Gly Val
 85 90 95
 Thr Asn Ala Asp Phe Met Arg Ser Ala Ile Asn Ala Lys Arg Glu Glu
 100 105 110
 Gly Gln Glu Ile Asn Leu Met Gln Phe Ile Lys Lys Leu Asp Lys Gln
 115 120 125
 Met Asp Phe Leu Asp Ile Asp Lys Asp Met Ala Gln Arg Tyr Leu Asn

Submitted: 2007-07-11

130		135		140
Glu Gly Phe Ser Gly Gly Glu Lys Lys Arg Asn Glu Ile Leu Gln Leu				
145		150		155
Met Met Leu Glu Pro Lys Phe Ala Ile Leu Asp Glu Ile Asp Ser Gly				160
		165		170
Leu Asp Ile Asp Ala Leu Lys Val Val Ser Lys Gly Ile Asn Gln Met				175
		180		185
Arg Gly Glu Glu Phe Gly Ala Leu Met Ile Thr His Tyr Gln Arg Leu				190
		195		200
Leu Asn Tyr Ile Thr Pro Asp Lys Val His Val Met Tyr Gly Gly Lys				205
		210		215
Val Val Lys Ser Gly Gly Pro Glu Leu Ala Lys Arg Leu Glu Glu Glu				220
225		230		235
Gly Tyr Glu Trp Val Lys Glu Glu Phe Gly Ala Ala Glu				240
		245		250

<210> 7111

<211> 82

<212> PRT

<213> S.epidermidis

<400> 7111

Ser Asn Thr Thr Ala Phe Leu Gly Phe Phe Gly Thr Ser Thr Val Leu		
1	5	10
		15
Glu Ile Phe Phe Leu Ser Leu Pro Leu Phe Ser Leu Pro Leu Ala Ser		
	20	25
		30
Lys Leu Phe Leu Met Val Thr Val Ser Leu Glu Ser Leu Phe Phe Phe		
	35	40
		45
Phe Glu Val Glu Leu Leu Phe Glu Leu Leu Leu Gln Ala Val Lys Thr		
	50	55
		60
Lys Thr Arg Asp Asn Asn Lys Asn Lys Thr Val Phe Phe Ile Cys Ala		
65	70	75
		80
Thr Pro		

<210> 7112

<211> 277

<212> PRT

<213> S.epidermidis

<400> 7112

Val Asn Lys Thr Ile Arg Asp Ile Ile Leu Val Met Ile Gly Ser Phe		
1	5	10
		15
Ile Phe Ser Ala Gly Ile Asn Ala Phe Val Ile Ser Gly Asn Leu Gly		
	20	25
		30
Glu Gly Gly Val Thr Gly Ile Ala Ile Val Leu Tyr Tyr Ala Phe His		
	35	40
		45
Ile Ser Pro Gly Ile Thr Asn Phe Val Leu Asn Ala Ile Leu Ile Ile		
	50	55
		60
Val Gly Tyr Lys Tyr Leu Ser Lys Arg Ser Thr Tyr Leu Thr Ile Phe		
65	70	75
		80
Ala Thr Val Leu Ile Ser Ile Phe Leu Gly Leu Thr Glu Thr Trp His		
	85	90
		95
Val Glu Thr Gly Asn Val Val Ile Asn Ala Val Phe Gly Gly Thr Cys		
	100	105
		110
Val Gly Leu Gly Ile Gly Ile Ile Val Leu Ala Gly Gly Thr Thr Ala		

3211

Val	Gly	Val	Val	Glu	Ser	Ile	Asn	Ser	Asn	Gly	Ser	Val	Thr	Val	Ser
225					230					235					240
Glu	Met	Asn	Trp	Asn	Gly	Gly	Val	Asn	Val	Lys	Ser	Tyr	Arg	Thr	Ile
				245					250					255	
Ser	Asn	Pro	Asn	Ser	Tyr	Asn	Tyr	Ile	His						
			260					265							

<210> 7114

<211> 281

<212> PRT

<213> S.epidermidis

<400> 7114

Cys	Thr	Met	Thr	Asn	Asp	Val	Gln	Ile	Leu	Asn	Asn	Gly	Tyr	Pro	Met
1				5					10					15	
Pro	Ala	Val	Gly	Leu	Gly	Val	Tyr	Lys	Ile	Ala	Asp	Glu	Gln	Met	Glu
			20					25					30		
Glu	Val	Val	Arg	Thr	Ala	Leu	Asp	Ala	Gly	Tyr	Arg	Ala	Phe	Asp	Thr
		35					40					45			
Ala	Tyr	Phe	Tyr	Gly	Asn	Glu	Lys	Ala	Leu	Gly	Ser	Ala	Leu	Lys	His
	50					55					60				
Ser	Asn	Val	Glu	Arg	Asp	Glu	Leu	Phe	Ile	Thr	Ser	Lys	Leu	Trp	Asn
65					70					75					80
Asp	Tyr	Gln	Gly	Tyr	Asp	Gln	Thr	Ile	Glu	Tyr	Phe	Asn	Lys	Ser	Leu
				85					90					95	
Asp	Asn	Leu	Gly	Leu	Asp	Tyr	Leu	Asp	Leu	Phe	Leu	Ile	His	Trp	Pro
			100					105					110		
Cys	Glu	Asn	Asp	Gln	Leu	Tyr	Ile	Glu	Ser	Tyr	Lys	Ala	Leu	Glu	His
		115					120					125			
Leu	Tyr	Glu	Glu	Gly	Lys	Ile	Lys	Ala	Ile	Gly	Val	Cys	Asn	Phe	Lys
	130					135					140				
Ile	His	His	Leu	Glu	Lys	Leu	Met	Lys	Glu	Thr	Lys	Ile	Thr	Pro	Gln
145					150					155					160
Val	Asn	Gln	Ile	Glu	Leu	His	Pro	Tyr	Phe	Asn	Gln	Gln	Asp	Val	Gln
				165					170					175	
Asp	Phe	Cys	Asp	Glu	His	Asp	Ile	Lys	Val	Thr	Ala	Trp	Met	Pro	Leu
			180					185					190		
Met	Arg	Asn	Lys	Gly	Leu	Leu	Asp	Asp	Pro	Val	Ile	Thr	Asp	Ile	Ala
		195					200					205			
His	Arg	Tyr	Asp	Lys	Thr	Pro	Ala	Gln	Ile	Val	Leu	Arg	Trp	His	Leu
	210					215					220				
Ala	His	Asn	Arg	Ile	Ile	Ile	Pro	Lys	Ser	Gln	Thr	Pro	Lys	Arg	Ile
225					230					235					240
Lys	Glu	Asn	Phe	Asp	Ile	Phe	Asp	Phe	Asn	Leu	Glu	Leu	Thr	Asp	Val
			245						250					255	
Ala	Glu	Ile	Asp	Ser	Leu	Asn	Lys	Asn	Ala	Arg	Gln	Gly	Lys	Asp	Pro
			260					265					270		
Asp	Asp	Val	Ser	Ile	Gly	Asp	Leu	Lys							
		275					280								

<210> 7115

<211> 319

<212> PRT

<213> S.epidermidis

<400> 7115

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2015. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

Thr Ser Met Thr Lys Gln Arg Ile Val Ile Ser Ser Leu Leu Phe Ile
 1 5 10 15
 Phe Ile Leu Thr Thr Cys Ser Phe Ser Tyr Ile Thr Phe Ser Lys Leu
 20 25 30
 Thr Ser Arg Thr Glu Asp Ile Lys Asn Ile Lys Thr Ile Lys Ala Lys
 35 40 45
 Pro Lys Leu Leu Leu Ser Thr Thr Gly Ile Gln Ala Pro Leu Asn Ser
 50 55 60
 Tyr Ile Phe Tyr Tyr Thr Pro Thr Leu Gly Gln Leu Gln Lys Leu Leu
 65 70 75 80
 Val Lys Asn His Ser Lys Val Ser Lys Asn Thr Pro Val Leu Glu Tyr
 85 90 95
 Tyr Asn Tyr Glu Lys Asp His Leu Tyr Glu Glu Leu Gln Asn Thr Leu
 100 105 110
 Ser Asn Glu Arg Asn Asn Lys Thr Leu Asn Ser Lys Asn Asp Leu His
 115 120 125
 Tyr Tyr Ser Phe Leu Asn Gln Leu Lys Leu Gln Met Ile Gln Thr Lys
 130 135 140
 Ser Ser Ile Lys Ser Thr Leu Phe Ser Pro Ile Asn Gly Ser Ile Ser
 145 150 155 160
 Tyr Ile Asn Ser Ile Pro Ser Lys Pro Asn Glu Lys Ile Val Gln Ile
 165 170 175
 Asn Ser Asn Glu Arg Ile Ile Arg Ala Asn Ile Ser Glu Ser Glu Leu
 180 185 190
 Asn Leu Leu Lys Ile Asn Gln Asn Ile Ser Val Thr Ser Ser Asp Asn
 195 200 205
 Thr Gln Phe Thr Ser Lys Ile Lys Glu Ile Ser Asn Ile Pro Ser Lys
 210 215 220
 Ile Lys Asn Gly Val Ser Tyr Tyr Asp Ile Leu Leu Ser Thr Gln Pro
 225 230 235 240
 Asn His Gln Ile Gly Thr His Phe Lys Ile Lys Leu Ala Ser Asn Asp
 245 250 255
 Ile Lys Leu Pro Thr Ser Ala Ile Val Gln Lys Arg Tyr Val Leu Ile
 260 265 270
 Leu Lys Asn Gly Lys Ile Thr Lys Arg Glu Val Thr Tyr Lys Lys Ser
 275 280 285
 Leu Lys Ser Gly Tyr Ile Asn Ile Thr Lys Gly Leu Leu Ile Asp Glu
 290 295 300
 Lys Val Val Lys Asn Pro Thr Ser Lys Leu Ile Asn Ile Tyr Ile
 305 310 315

<210> 7116

<211> 164

<212> PRT

<213> S.epidermidis

<400> 7116

Ile Glu Met Thr Ala Ile Leu Trp Ile Leu Ile Ile Ile Ala Phe Ala
 1 5 10 15
 Leu Ala Phe Ile Gly Leu Ile Lys Pro Val Ile Pro Ser Leu Leu Met
 20 25 30
 Leu Trp Ile Gly Phe Leu Ile Tyr Gln Phe Gly Phe His Glu Gly Arg
 35 40 45
 Leu Ser Trp Ile Phe Tyr Val Ala Met Ile Ile Phe Thr Ile Met Ile
 50 55 60
 Leu Val Ala Asp Phe Val Met Asn Lys Tyr Phe Val Asn Arg Phe Gly

65					70					75				80	
Gly	Ser	Lys	Ile	Gly	Glu	Tyr	Thr	Ala	Leu	Ile	Gly	Val	Ile	Val	Gly
				85					90					95	
Cys	Phe	Val	Phe	Pro	Pro	Phe	Gly	Ile	Ile	Ile	Ile	Pro	Phe	Val	Ala
				100				105					110		
Val	Phe	Ile	Val	Glu	Leu	Val	Gln	Gly	Phe	Asn	Phe	Gln	Gln	Ala	Ile
				115				120					125		
Lys	Val	Ser	Phe	Gly	Ser	Val	Ile	Ala	Phe	Leu	Ala	Ser	Thr	Ile	Ala
				130				135					140		
Gln	Gly	Leu	Ile	Met	Ile	Val	Met	Val	Ile	Trp	Phe	Phe	Leu	Asp	Val
					150					155					160
Phe	Leu	Ile	Asn												

<210> 7117

<211> 97

<212> PRT

<213> S.epidermidis

<400> 7117

Leu	Asn	Ala	Thr	Ser	Ala	Pro	Ser	Thr	Ile	Phe	Phe	Pro	Lys	Thr	Leu
1				5					10					15	
Ile	Thr	Phe	Ser	Lys	Phe	Ile	Pro	Asp	Ile	Asn	Pro	Pro	Thr	Ser	Ala
			20					25					30		
Leu	Ile	Asn	Lys	Leu	Met	Thr	Thr	Phe	Asn	Arg	His	Lys	His	Ser	Met
		35				40						45			
Ile	Ile	Asn	Met	Thr	Ala	Ile	Thr	Thr	Ala	Phe	Ile	Ile	Leu	Pro	His
	50					55					60				
Pro	Leu	Ser	Leu	Tyr	Arg	Thr	Lys	Val	Phe	Ile	Lys	Tyr	Ile	Leu	Ala
65				70					75					80	
Arg	His	Ile	Phe	Asn	Val	Asn	Val	Lys	Lys	Asp	Ser	Thr	Ile	Ile	Tyr
				85					90					95	
Ile															

<210> 7118

<211> 524

<212> PRT

<213> S.epidermidis

<400> 7118

Asn	Lys	Glu	Thr	Ile	Lys	Met	Ala	Lys	Gly	Asp	Gln	Tyr	Gln	Ala	His
1				5					10					15	
Thr	Glu	Lys	Tyr	His	Asp	Lys	Lys	Ser	Lys	Lys	Ser	Tyr	Lys	Pro	Val
			20					25					30		
Trp	Ile	Ile	Ile	Ser	Phe	Ile	Ile	Leu	Ile	Thr	Ile	Leu	Leu	Leu	Pro
		35					40					45			
Thr	Pro	Ala	Gly	Leu	Pro	Val	Met	Ala	Lys	Ala	Ala	Leu	Ala	Ile	Leu
	50					55					60				
Ala	Phe	Ala	Val	Val	Met	Trp	Val	Thr	Glu	Ala	Val	Thr	Tyr	Pro	Val
65				70					75					80	
Ser	Ala	Thr	Leu	Ile	Leu	Gly	Leu	Met	Ile	Leu	Leu	Leu	Gly	Leu	Ser
				85					90					95	
Pro	Val	Gln	Asp	Leu	Ser	Glu	Lys	Leu	Gly	Asn	Pro	Lys	Ser	Gly	Asp
			100					105					110		
Ile	Ile	Leu	Lys	Gly	Ser	Asp	Ile	Leu	Gly	Thr	Asn	Asn	Ala	Leu	Ser

<400> 7119

Gln	Asn	Phe	Phe	Glu	Asn	Ser	Ile	Val	Asp	Asn	Phe	Gln	Tyr	Leu	Lys	1	5	10	15
Arg	Lys	Ile	Ser	Met	Glu	Ala	Tyr	Lys	Ile	Glu	His	Leu	Asn	Lys	Ser	20	25	30	
Tyr	Ala	Asp	Lys	Glu	Ile	Phe	Asn	Asp	Leu	Asn	Leu	Ser	Ile	Ser	Glu	35	40	45	
His	Glu	Arg	Ile	Gly	Leu	Val	Gly	Ile	Asn	Gly	Thr	Gly	Lys	Ser	Thr	50	55	60	
Leu	Leu	Lys	Val	Ile	Gly	Gly	Leu	Asp	Glu	Asp	Phe	Thr	Ala	Asp	Ile	65	70	75	80
Thr	His	Pro	Asn	Gln	Tyr	Arg	Ile	Arg	Tyr	Ser	Ser	Gln	Lys	Gln	Asp	85	90	95	
Leu	Asn	Gly	His	Met	Thr	Val	Phe	Glu	Ala	Val	Leu	Ser	Ser	Asp	Thr	100	105	110	
Pro	Thr	Leu	Arg	Ile	Ile	Lys	Lys	Tyr	Glu	Glu	Ala	Val	Asn	Arg	Tyr	115	120	125	
Ala	Leu	Asp	Gln	Ser	Asp	Ser	Asn	Phe	Asn	Lys	Met	Met	Glu	Ala	Gln	130	135	140	
Glu	Glu	Met	Asp	Gln	Lys	Asp	Ala	Trp	Asp	Tyr	Asn	Ala	Glu	Ile	Lys	145	150	155	160
Thr	Ile	Leu	Ser	Lys	Leu	Gly	Ile	His	Asp	Thr	Thr	Lys	Lys	Ile	Val	165	170	175	
Glu	Leu	Ser	Gly	Gly	Gln	Gln	Lys	Arg	Val	Val	Leu	Ala	Lys	Thr	Leu	180	185	190	
Ile	Glu	Gln	Pro	Asp	Leu	Leu	Leu	Leu	Asp	Glu	Pro	Thr	Asn	His	Leu	195	200	205	
Asp	Phe	Glu	Ser	Ile	Arg	Trp	Leu	Ile	Asn	Tyr	Val	Lys	Gln	Tyr	Pro	210	215	220	
His	Thr	Val	Leu	Phe	Val	Thr	His	Asp	Arg	Tyr	Phe	Leu	Asn	Glu	Val	225	230	235	240
Ser	Thr	Arg	Ile	Ile	Glu	Leu	Asp	Arg	Gly	Lys	Leu	Lys	Thr	Tyr	Pro	245	250	255	
Gly	Asn	Tyr	Glu	Asp	Tyr	Ile	Val	Met	Arg	Ala	Glu	Asn	Glu	Leu	Val	260	265	270	
Glu	Gln	Lys	Gln	Gln	Glu	Lys	Gln	Lys	Ala	Leu	Tyr	Lys	Gln	Glu	Leu	275	280	285	
Ala	Trp	Met	Arg	Ala	Gly	Ala	Lys	Ala	Arg	Thr	Thr	Lys	Gln	Gln	Ala	290	295	300	
Arg	Ile	Asn	Arg	Phe	Asn	Gln	Leu	Glu	Ser	Asp	Val	Lys	Thr	Gln	His	305	310	315	320
Thr	Gln	Asp	Lys	Gly	Glu	Leu	Asn	Leu	Ala	Tyr	Ser	Arg	Leu	Gly	Lys	325	330	335	
Gln	Val	Tyr	Glu	Leu	Lys	Asn	Leu	Ser	Lys	Ser	Ile	Asn	Asn	Lys	Val	340	345	350	
Leu	Phe	Glu	Asp	Val	Thr	Glu	Ile	Gln	Ser	Gly	Arg	Arg	Ile	Gly		355	360	365	
Ile	Val	Gly	Pro	Asn	Gly	Ala	Gly	Lys	Thr	Thr	Leu	Leu	Asn	Ile	Leu	370	375	380	
Ser	Asn	Glu	Asp	Gln	Asp	Tyr	Glu	Gly	Glu	Leu	Lys	Ile	Gly	Gln	Thr	385	390	395	400
Val	Lys	Val	Ala	Tyr	Phe	Lys	Gln	Thr	Glu	Lys	Thr	Leu	Asp	Arg	Asp	405	410	415	
Ile	Arg	Val	Ile	Asp	Tyr	Leu	Arg	Glu	Glu	Ser	Glu	Met	Ala	Lys	Glu	420	425	430	

Lys Asp Gly Thr Ser Ile Ser Val Thr Gln Leu Leu Glu Arg Phe Leu
 435 440 445
 Phe Pro Ser Ala Thr His Gly Lys Lys Val Tyr Lys Leu Ser Gly Gly
 450 455 460
 Glu Gln Lys Arg Leu Tyr Leu Leu Arg Leu Leu Val His Lys Pro Asn
 465 470 475 480
 Val Leu Leu Leu Asp Glu Pro Thr Asn Asp Leu Asp Thr Glu Thr Leu
 485 490 495
 Thr Ile Leu Glu Asp Tyr Ile Asp Asp Phe Gly Gly Ser Val Ile Thr
 500 505
 Val Ser His Asp Arg Tyr Phe Leu Asn Lys Val Val Gln Glu Tyr Trp
 515 520 525
 Phe Ile His Asp Gly Lys Ile Glu Lys Ile Ile Gly Ser Phe Glu Asp
 530 535 540
 Tyr Glu Ser Phe Lys Lys Glu His Glu Arg Gln Ala Met Leu Ser Lys
 545 550 555 560
 Gln Thr Glu Gln Gln Asn Lys His Lys His Gln Pro Lys Lys Lys Thr
 565 570 575
 Gly Leu Ser Tyr Lys Glu Lys Leu Glu Tyr Glu Thr Ile Met Thr Arg
 580 585 590
 Ile Glu Met Thr Glu Thr Arg Leu Glu Asp Leu Glu Gln Glu Met Ile
 595 600 605
 Asn Ala Ser Asp Asn Tyr Ala Arg Ile Lys Glu Leu Asn Glu Asp Lys
 610 615 620
 Glu Gln Leu Glu Ala Thr Tyr Glu Ala Asp Ile Thr Arg Trp Ser Glu
 625 630 635 640
 Leu Glu Glu Ile Lys Glu Gln
 645

<210> 7120

<211> 170

<212> PRT

<213> S.epidermidis

<400> 7120

Glu Asp Ile Ala Met Gln His Leu Ile Lys Lys His Val Leu Asn Gly
 1 5 10 15
 Glu Phe Glu Leu Val Arg Gln Leu Met Ser Glu Thr Asp Phe Met Glu
 20 25 30
 Phe Glu Glu Ala Tyr Ile Ser Ser Ala His Glu Val Glu Ser Met Met
 35 40 45
 Phe Tyr Thr Cys Ile Leu Asp Met Ile Lys Val Glu Glu Ser Ser Glu
 50 55 60
 Leu His Asp Leu Ala Phe Leu Leu Leu Val Tyr Pro Leu Ser Glu Tyr
 65 70 75 80
 Glu Gly Ala Leu Asp Ser Ala Tyr Tyr His Ala Asp Ser Ser Ile Lys
 85 90 95
 Leu Thr Asp Gly Asn Glu Val Lys Ser Leu Leu Gln Met Leu Leu Leu
 100 105 110
 His Ala Ile Pro Glu Pro Val Ile Ser Asp Lys Lys Ala Phe Asp Val
 115 120 125
 Ala Lys Arg Ile Leu Lys Leu Asp Pro Ser Asn Asn Val Ala Arg Asn
 130 135 140
 Val Leu Lys Asp Thr Ala Lys Arg Met Asp Asn Val Val Val Asp Ile
 145 150 155 160
 Asn Glu Leu Asn Asn Gln Arg Asp Ala Arg

50

<210> 7123
 <211> 66
 <212> PRT
 <213> S.epidermidis

<400> 7123
 Ser Ile Ala Ala Leu Leu Asn Tyr Val Val Gln Thr Leu Lys Phe Ser
 1 5 10 15
 Ser Arg His Ser Ile Arg Ile Leu Phe Phe Gly Leu Glu Ser Ile
 20 25 30
 Tyr Val Ala Cys Phe Ile Tyr Asn Thr Met Ile Gln Cys His Ala Lys
 35 40 45
 Ile Lys Val Cys Leu Lys Phe Arg Arg Tyr Leu Thr Leu Asn Gln Val
 50 55 60
 Lys Arg
 65

<210> 7124
 <211> 358
 <212> PRT
 <213> S.epidermidis

<400> 7124
 Ser Asn Tyr Leu Lys Gly Leu Ala Met Met Lys Glu Lys Leu Lys Trp
 1 5 10 15
 Ile Trp Ile Thr Thr Leu Ile Ile Leu Val Val Ser Leu Ile Leu Ala
 20 25 30
 Phe Asn Leu Lys Ser His Tyr Asn His Val His Asp Lys Gln Lys Ser
 35 40 45
 Lys Thr Asn Val Gln Ile Asn Asn Lys Asn Val Lys Leu Tyr Arg Asp
 50 55 60
 Ile Ser Tyr Gly Lys Gly Ile Pro Asn Ser Lys Leu Asp Ile Ile Thr
 65 70 75 80
 Pro Ala Asp Met Ser Asn Asp Thr Lys Leu Pro Val Ile Phe Trp Met
 85 90 95
 His Gly Gly Gly Phe Ile Ala Gly Asp Lys Gln Tyr Lys Asn Gln Leu
 100 105 110
 Leu Ser Lys Val Ala Glu Gln Gly Tyr Ile Ile Val Asn Val Asn Tyr
 115 120 125
 Ala Leu Ala Pro Gln Tyr Lys Tyr Pro Thr Pro Leu Val Gln Leu Asn
 130 135 140
 Gln Ala Val Lys Phe Ile Lys Glu Asn Lys His Glu Leu Pro Ile Asp
 145 150 155 160
 Phe Asp Gln Val Val Ile Gly Gly Asp Ser Ala Gly Ala Gln Leu Thr
 165 170 175
 Ser Gln Tyr Val Ala Met Gln Thr Asn Glu Asp Leu Arg Asp Glu Met
 180 185 190
 His Phe Glu Gln Gln Phe Lys Pro Ser Gln Ile Lys Ala Val Phe
 195 200 205
 Phe Gly Gly Phe Tyr Asn Met Lys Thr Val Lys Ala Thr Glu Phe Pro
 210 215 220
 Arg Ile Gln Leu Phe Met Lys Ser Tyr Thr Gly Thr Ser His Trp Glu
 225 230 235 240
 Thr Asp Phe Lys Asn Leu Ser Gln Met Ser Thr Leu Asn Gln Val Thr

3220

				245					250					255			
His	Glu	Tyr	Pro	Pro	Thr	Phe	Leu	Ser	Val	Gly	Asp	Ala	Asp	Pro	Phe		
			260					265					270				
Tyr	Ser	Gln	Asn	Lys	Glu	Phe	Ala	Gln	Gly	Leu	Lys	Thr	Glu	Asn	Ile		
		275					280					285					
Pro	Val	Asp	Thr	Leu	Phe	Tyr	Asp	Gly	Ser	His	His	Leu	His	His	Gln		
	290					295				300							
Tyr	Gln	Phe	His	Leu	Asp	Lys	Pro	Glu	Ser	Lys	Glu	Asn	Ile	Lys	Lys		
305					310					315					320		
Val	Leu	Leu	Phe	Leu	Ser	Arg	Asn	Thr	Ser	Ser	Ser	Gly	Val	Glu	Ser		
			325						330					335			
Asn	Glu	Ser	Ser	Gln	Asn	Gln	Pro	Thr	Gln	Asn	Thr	Asn	Glu	Val	Ser		
		340					345						350				
Leu	Tyr	Pro	Phe	Asp	Ser												
		355															

<210> 7125

<211> 156

<212> PRT

<213> S.epidermidis

<400> 7125

Gln	Phe	Tyr	Ala	Ile	Met	Thr	Phe	Ile	Ile	Val	Arg	Val	Lys	Val	Ser		
1				5				10					15				
Ser	Lys	Leu	Asn	Lys	Asn	Ile	Asn	Ile	Gln	Thr	Arg	Gln	Val	Leu	Lys		
		20					25					30					
Gln	Asn	Gly	Glu	Lys	Gln	Arg	Phe	Glu	Phe	Thr	Thr	Lys	Gly	Ser	Trp		
	35					40						45					
Gln	Gln	Lys	Phe	Ala	Asp	Phe	Ile	Arg	Tyr	Glu	Glu	Gln	Ile	Glu	Asp		
	50				55					60							
Ala	Lys	Val	Asn	Val	Thr	Ile	Lys	Ile	Glu	Asp	Ser	Gly	Val	Lys	Leu		
65				70					75						80		
Ile	Arg	Lys	Gly	Asp	Ile	Asn	Met	Asn	Leu	His	Phe	Val	Glu	Gly	His		
			85				90							95			
Glu	Thr	Thr	Thr	Leu	Tyr	Asp	Val	Pro	Thr	Gly	Lys	Ile	Pro	Leu	Thr		
		100					105						110				
Val	Lys	Thr	Leu	Ser	Leu	Met	His	Phe	Val	Thr	His	Asn	Gly	Gly	Lys		
	115					120						125					
Leu	Lys	Ile	His	Tyr	Glu	Leu	Tyr	Gln	Asp	Glu	Gln	Lys	Met	Gly	Ser		
	130					135					140						
Tyr	Gln	Tyr	Glu	Ile	Asn	Tyr	Lys	Glu	Ile	Ser	Glu						
145					150					155							

<210> 7126

<211> 56

<212> PRT

<213> S.epidermidis

<400> 7126

Cys	Ala	Thr	Ala	Ile	Ile	Thr	Phe	Ser	Leu	Phe	Arg	Ala	Val	Thr	Phe		
1				5				10					15				
Asn	Ala	Leu	Gly	Ile	Val	Glu	Gly	Ser	Ala	Ile	Ser	Glu	Trp	Tyr	Arg		
		20					25					30					
Ile	Thr	Leu	Lys	Tyr	Asp	Gly	Arg	Pro	Leu	Lys	Ile	Pro	Ser	Leu	Leu		
	35					40						45					
Cys	Leu	Ile	Leu	Val	Ile	Cys	Pro										

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2015. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

55

<400> 7127

<210> 7128

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7128

<210> 7129

<211> 666

<212> PRT

<213> S.epidermidis

<400> 7129

Glu	Ala	Tyr	Phe	Gly	Met	Val	Glu	His	Val	Pro	Phe	Lys	Leu	Lys	Ser
1				5					10					15	
Glu	Phe	Glu	Pro	Gln	Gly	Asp	Gln	Pro	Gln	Ala	Ile	Gln	Lys	Ile	Val
			20					25					30		
Asp	Gly	Val	Asn	Glu	Gly	Lys	Arg	His	Gln	Thr	Leu	Leu	Gly	Ala	Thr
		35					40					45			
Gly	Thr	Gly	Lys	Thr	Phe	Thr	Met	Ser	Asn	Val	Ile	Lys	Glu	Val	Gly
		50				55					60				
Lys	Pro	Thr	Leu	Ile	Ile	Ala	His	Asn	Lys	Thr	Leu	Ala	Gly	Gln	Leu
65					70					75					80
Tyr	Ser	Glu	Phe	Lys	Glu	Phe	Phe	Pro	Glu	Asn	Arg	Val	Glu	Tyr	Phe
				85					90					95	

Val	Ser	Tyr	Tyr	Asp	Tyr	Tyr	Gln	Pro	Glu	Ala	Tyr	Val	Pro	Ser	Thr
			100					105					110		
Asp	Thr	Phe	Ile	Glu	Lys	Asp	Ala	Ser	Ile	Asn	Asp	Glu	Ile	Asp	Gln
		115					120					125			
Leu	Arg	His	Ser	Ala	Thr	Ser	Ser	Leu	Phe	Glu	Arg	Asp	Asp	Val	Ile
		130					135					140			
Ile	Ile	Ala	Ser	Val	Ser	Cys	Ile	Tyr	Gly	Leu	Gly	Asn	Pro	Glu	Glu
145					150					155					160
Tyr	Lys	Asn	Leu	Val	Val	Ser	Val	Arg	Val	Gly	Met	Glu	Met	Glu	Arg
			165						170					175	
Ser	Glu	Leu	Leu	Arg	Lys	Leu	Val	Asp	Val	Gln	Tyr	Ser	Arg	Asn	Asp
			180					185					190		
Ile	Asp	Phe	Gln	Arg	Gly	Thr	Phe	Arg	Val	Arg	Gly	Asp	Val	Val	Glu
		195					200					205			
Ile	Phe	Pro	Ala	Ser	Arg	Glu	Glu	Met	Cys	Ile	Arg	Val	Glu	Phe	Phe
	210					215					220				
Gly	Asp	Glu	Ile	Asp	Arg	Ile	Arg	Glu	Val	Asn	Tyr	Leu	Thr	Gly	Glu
225					230					235					240
Val	Ile	Arg	Glu	Arg	Glu	His	Phe	Thr	Ile	Phe	Pro	Ala	Ser	His	Phe
				245				250						255	
Val	Thr	Arg	Glu	Glu	Lys	Met	Lys	Val	Ala	Ile	Glu	Arg	Ile	Glu	Lys
			260					265					270		
Glu	Leu	Glu	Glu	Arg	Leu	Lys	Glu	Leu	Arg	Asp	Glu	Asn	Lys	Leu	Leu
		275					280					285			
Glu	Ala	Gln	Arg	Leu	Glu	Gln	Arg	Thr	Asn	Tyr	Asp	Leu	Glu	Met	Met
	290					295					300				
Arg	Glu	Met	Gly	Phe	Cys	Ser	Gly	Ile	Glu	Asn	Tyr	Ser	Val	His	Leu
305					310					315					320
Thr	Leu	Arg	Pro	Leu	Gly	Ser	Thr	Pro	Tyr	Thr	Leu	Leu	Asp	Tyr	Phe
			325					330						335	
Gly	Asp	Asp	Trp	Leu	Val	Met	Ile	Asp	Glu	Ser	His	Val	Thr	Leu	Pro
			340					345					350		
Gln	Ile	Arg	Gly	Met	Tyr	Asn	Gly	Asp	Arg	Ala	Arg	Lys	Gln	Val	Leu
		355					360					365			
Ile	Asp	His	Gly	Phe	Arg	Leu	Pro	Ser	Ala	Leu	Asp	Asn	Arg	Pro	Leu
	370					375					380				
Lys	Phe	Glu	Glu	Phe	Glu	Glu	Lys	Thr	Lys	Gln	Leu	Val	Tyr	Val	Ser
385					390					395					400
Ala	Thr	Pro	Gly	Pro	Tyr	Glu	Leu	Glu	His	Thr	Asp	Glu	Met	Val	Glu
				405					410					415	
Gln	Ile	Ile	Arg	Pro	Thr	Gly	Leu	Leu	Asp	Pro	Lys	Ile	Asp	Val	Arg
			420					425					430		
Pro	Thr	Glu	Asn	Gln	Ile	Asp	Asp	Leu	Leu	Ser	Glu	Ile	Gln	Asp	Arg
	435					440						445			
Val	Asp	Lys	Asp	Glu	Arg	Val	Leu	Val	Thr	Thr	Leu	Thr	Lys	Lys	Met
	450					455					460				
Ser	Glu	Asp	Leu	Thr	Thr	Tyr	Met	Lys	Glu	Ala	Gly	Ile	Lys	Val	Asn
465					470					475					480
Tyr	Leu	His	Ser	Glu	Ile	Lys	Thr	Leu	Glu	Arg	Ile	Glu	Ile	Ile	Arg
				485					490					495	
Asp	Leu	Arg	Met	Gly	Thr	Tyr	Asp	Ala	Ile	Val	Gly	Ile	Asn	Leu	Leu
			500					505					510		
Arg	Glu	Gly	Ile	Asp	Ile	Pro	Glu	Val	Ser	Leu	Val	Val	Ile	Leu	Asp
		515					520					525			
Ala	Asp	Lys	Glu	Gly	Phe	Leu	Arg	Ser	Asp	Arg	Ser	Leu	Ile	Gln	Thr
	530					535					540				

Ile Gly Arg Ala Ala Arg Asn Asp Lys Gly Glu Val Ile Met Tyr Ala
 545 550 555 560
 Asp Lys Ile Thr Asp Ser Met Gln Tyr Ala Ile Asp Glu Thr Gln Arg
 565 570 575
 Arg Arg Glu Ile Gln Ile Ala His Asn Lys Glu His Gly Ile Thr Pro
 580 585 590
 Lys Thr Ile Asn Lys Lys Ile His Asp Val Ile Ser Ala Thr Val Glu
 595 600 605
 Ser Asp Glu Thr Asn Gln Gln Gln Gln Thr Glu Leu Pro Lys Lys Met
 610 615 620
 Thr Lys Lys Glu Arg Gln Lys Thr Ile Glu Asn Ile Glu Lys Glu Met
 625 630 635 640
 Lys Lys Ala Ala Lys Asp Leu Asp Phe Glu Lys Ala Thr Glu Leu Arg
 645 650 655
 Asp Met Leu Phe Glu Leu Lys Ala Glu Gly
 660 665

<210> 7130

<211> 148

<212> PRT

<213> S.epidermidis

<400> 7130

Gly Gly Arg Ala Leu Ala Ser Ile Arg Glu Asp Val Gln Phe Ser Asn
 1 5 10 15
 Pro Thr Ile Ser Glu Ser Ser Phe Lys Ile Asn Glu Asn Phe Asp Ser
 20 25 30
 Glu Asn Phe Glu Gly Phe Gly Asp Ile Lys Leu Asn Leu Lys Lys Tyr
 35 40 45
 Tyr Tyr Glu Glu Asn Asn Glu Ile Asp Asn Asn Asn Asn Asn Gly
 50 55 60
 Ser Ala Leu Leu Ser Leu Glu Ile Ile Ile Gly Asp Ile Ala Trp Gln
 65 70 75 80
 Tyr Pro Phe Met Phe Lys Val Glu Ile Glu Ser Phe Phe Glu Trp Glu
 85 90 95
 Asn Phe Lys Gly Thr Asp Ile Asp Lys Phe Leu Glu Ile Asn Gly Ala
 100 105 110
 Ala Ile Leu Tyr Ser Tyr Ser Arg Ala His Ile Ser His Ile Thr Asn
 115 120 125
 Thr Ser Lys Tyr Pro Ser Phe Asp Leu Pro Phe Tyr Asn Phe Thr Asp
 130 135 140
 Asn Asp Tyr Gln
 145

<210> 7131

<211> 459

<212> PRT

<213> S.epidermidis

<400> 7131

Asn Leu Met Ala Ile Gly Val Ile Leu Asn Arg Val Phe Arg Leu Asn
 1 5 10 15
 Asn Asn Pro Leu Phe Asp Tyr Ile Tyr Ser Asn Lys Glu Ser Ile Asn
 20 25 30
 His Cys Tyr Phe Ile Ile Pro Thr Glu Glu Phe Glu Glu Glu Ala Lys
 35 40 45

<213> S.epidermidis

<400> 7132

Val	Ile	Val	Ala	Lys	Lys	Lys	Ser	Lys	Ser	Pro	Gly	Thr	Leu	Ala	Glu	
1				5					10					15		
Asn	Arg	Lys	Ala	Arg	His	Asp	Tyr	Asn	Ile	Glu	Asp	Thr	Ile	Glu	Ala	
			20					25					30			
Gly	Ile	Ala	Leu	Arg	Gly	Thr	Glu	Ile	Lys	Ser	Ile	Arg	Arg	Gly	Ser	
		35					40					45				
Ala	Asn	Leu	Lys	Asp	Ser	Phe	Ala	Gln	Val	Arg	Arg	Gly	Glu	Met	Tyr	
	50					55				60						
Leu	Asn	Asn	Met	His	Ile	Ala	Pro	Tyr	Glu	Glu	Gly	Asn	Arg	Phe	Asn	
65				70					75					80		
His	Asp	Pro	Leu	Arg	Thr	Arg	Lys	Leu	Leu	Leu	His	Lys	Lys	Glu	Ile	
			85					90						95		
Gln	Lys	Leu	Gly	Glu	Arg	Thr	Arg	Glu	Ile	Gly	Tyr	Ser	Ile	Ile	Pro	
		100						105					110			
Leu	Lys	Leu	Tyr	Leu	Lys	His	Gly	Gln	Cys	Lys	Val	Leu	Leu	Gly	Val	
		115					120					125				
Ala	Arg	Gly	Lys	Lys	Lys	Tyr	Asp	Lys	Arg	Gln	Ala	Leu	Lys	Glu	Lys	
	130					135				140						
Ala	Val	Lys	Arg	Asp	Ile	Asp	Arg	Ala	Val	Lys	Ala	Arg	Tyr			
145					150					155						

<210> 7133

<211> 55

<212> PRT

<213> S.epidermidis

<400> 7133

Lys	Arg	Glu	Ala	Ile	Asn	Ser	Asp	Glu	Phe	Tyr	Cys	Thr	Pro	Leu	Met	
1				5					10					15		
Phe	Lys	Phe	Tyr	Phe	Leu	Gln	Ile	Tyr	Phe	Thr	Thr	Lys	Arg	Asp	Ser	
		20						25					30			
Ser	Asn	Leu	Phe	Leu	Asn	Ser	Phe	Cys	Ser	Ala	Leu	Asp	Phe	Phe	Leu	
		35					40					45				
Lys	Val	Leu	Arg	Asn	Ala	Ser										
	50					55										

<210> 7134

<211> 265

<212> PRT

<213> S.epidermidis

<400> 7134

Phe	Met	His	Phe	Lys	Arg	Val	Val	Lys	Trp	Gly	Leu	Asn	Met	Tyr	Gln	
1				5					10					15		
Asn	Gln	Arg	Ile	Lys	Asp	Lys	Ile	Asn	Ile	Leu	Gly	Val	Ser	Phe	Asp	
		20						25					30			
Asn	Thr	Thr	Met	Leu	Glu	Met	Val	Glu	Asn	Ile	Lys	Gln	Phe	Ile	Ser	
		35					40					45				
Ser	Asn	Thr	Asp	Asp	Asn	Leu	Phe	Ile	Val	Thr	Ala	Asn	Pro	Glu	Ile	
	50					55				60						
Val	Asp	Tyr	Ala	Thr	Glu	His	Glu	Leu	Tyr	Arg	Asn	Leu	Ile	Asn	Gln	
65				70					75					80		
Ala	Asp	Tyr	Val	Val	Pro	Asp	Gly	Thr	Gly	Ile	Val	Lys	Ala	Ser	Lys	

85 90 95
 Arg Leu Lys Gln Pro Leu Lys Arg Arg Val Pro Gly Ile Glu Leu Leu
 100 105 110
 Glu Glu Cys Leu Lys Ile Ala His Val Ser His Gln Arg Val Tyr Leu
 115 120 125
 Leu Gly Ser Lys Asn Glu Ile Val Glu Ser Ala Glu Lys Lys Leu Gln
 130 135 140
 Ser Gln Tyr Pro Asn Ile His Phe Ala His His His Gly Tyr Ile His
 145 150 155 160
 Leu Glu Asp Glu Thr Val Ile Lys Arg Ile Thr Ser Phe Asn Pro Asp
 165 170 175
 Tyr Ile Phe Val Gly Met Gly Phe Pro Lys Gln Glu Gln Trp Ile Gln
 180 185 190
 Lys His Lys Asp Lys Phe Lys His Thr Val Met Met Gly Val Gly Gly
 195 200 205
 Ser Phe Glu Val Phe Ser Gly Ser Lys Lys Arg Ala Pro Gln Ile Phe
 210 215 220
 Arg Lys Leu Asn Ile Glu Trp Val Tyr Arg Val Leu Ile Asp Trp Lys
 225 230 235 240
 Arg Ile Gly Arg Met Ile Ser Ile Pro Lys Phe Met Leu Lys Val Ala
 245 250 255
 Ile Gln Lys Tyr Lys Met Lys Ser Lys
 260 265

<210> 7135
 <211> 108
 <212> PRT
 <213> S.epidermidis

<400> 7135
 Gly Phe Asn Phe Gly Gly Asp Thr Met Ile Glu Met Phe Thr Gln Ile
 1 5 10 15
 Phe Ile Ile Ser Ala Leu Val Ile Phe Gly Met Ala Leu Leu Val Cys
 20 25 30
 Leu Val Arg Leu Ile Lys Gly Pro Thr Thr Ala Asp Arg Val Val Ser
 35 40 45
 Phe Asp Ala Ser Ser Ala Val Val Met Ser Ile Val Gly Val Met Ser
 50 55 60
 Val Ile Phe Asn Ser Val Ser Tyr Leu Asp Ser Ile Met Leu Ile Ala
 65 70 75 80
 Ile Ile Ser Phe Val Ser Ser Val Ser Ile Ser Arg Phe Ile Gly Glu
 85 90 95
 Gly Arg Val Phe Asn Gly Asn His Lys Arg His Arg
 100 105

<210> 7136
 <211> 203
 <212> PRT
 <213> S.epidermidis

<400> 7136
 Arg Val Asn Phe Ile Leu Lys Tyr Arg Gln Asn Lys His Phe Arg Leu
 1 5 10 15
 Asn Gly Val Phe Lys Met Val Ile Tyr Ile Glu Thr Glu Arg Leu Asn
 20 25 30
 Leu Arg Asp Trp Glu Thr Lys Asp Leu Leu Pro Phe Gln Lys Met Asn

Asn Lys Lys Ile Ser Asn Thr Leu Leu Tyr Val Asn Gln Phe Asn Val
 20 25 30
 Ile Val Ile Phe Lys Pro Leu Thr Thr Val Ile Ser Ser Gln Glu Gln
 35 40 45
 Lys

<210> 7140
 <211> 256
 <212> PRT
 <213> S.epidermidis

<400> 7140
 Ala Thr Leu Tyr Trp Leu Arg Tyr His Leu Lys Lys Ser Ser Leu Ile
 1 5 10 15
 Leu Glu Thr Val Ile Thr Glu Val Lys Ile Ser Met Thr His Leu Leu
 20 25 30
 Ile Val Asp Asp Glu Lys Asp Ile Val Asp Ile Cys Gln Thr Tyr Phe
 35 40 45
 Glu Tyr Glu Gly Tyr Gln Val Thr Thr Thr Thr Cys Gly Lys Glu Ala
 50 55 60
 Leu Lys Leu Leu Ser Ser Asp Ile Asp Ile Met Ile Leu Asp Ile Met
 65 70 75 80
 Met Pro Glu Val Ser Gly Tyr Asp Ile Val Lys Lys Met Lys Asp Met
 85 90 95
 Gln Leu Asp Ile Pro Phe Ile Tyr Leu Thr Ala Lys Thr Gln Glu His
 100 105 110
 Asp Thr Ile Tyr Ala Leu Thr Leu Gly Ala Asp Asp Tyr Ile Lys Lys
 115 120 125
 Pro Phe Ser Pro Arg Glu Leu Val Leu Arg Thr Asn Asn Leu Leu Ala
 130 135 140
 Arg Met Ser Lys Ser Asn His Ser Asn Lys Ile Glu Gln Leu Glu Phe
 145 150 155 160
 Asp Gly Leu Val Leu Lys Asn Leu Ser Lys Thr Leu Thr Ile Asn Asn
 165 170 175
 Ile Glu Ile Pro Met Arg Ile Lys Glu Phe Glu Leu Leu Trp Tyr Leu
 180 185 190
 Ala Ser Arg Glu Gly Glu Val Ile Ser Lys Ser Glu Leu Leu Glu Lys
 195 200 205
 Val Trp Gly Tyr Asp Tyr Tyr Glu Asp Ala Asn Thr Val Asn Val His
 210 215 220
 Ile His Arg Ile Arg Glu Lys Leu Glu Lys His Asp Phe Leu Pro Tyr
 225 230 235 240
 Thr Ile Thr Thr Val Trp Gly Leu Gly Tyr Lys Phe Glu Arg Ser Arg
 245 250 255

<210> 7141
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 7141
 Tyr Arg Asn Leu Lys Ser Lys Phe Lys Tyr Lys Ser Ser Asn His Thr
 1 5 10 15
 Ser Ile Phe Val Ser Ile Leu Ser Ile Lys Tyr Ser Phe Asn Trp Leu
 20 25 30

Ile Gln Asn Leu Ser Lys Gln Asn Lys Leu Arg His Leu Leu Arg Ile
 35 40 45
 Arg Thr Pro Lys Leu Asp
 50

<210> 7142
 <211> 68
 <212> PRT
 <213> S.epidermidis

<400> 7142
 Lys Glu Val Tyr Met Leu Tyr Val Ile Ile Gly Phe Phe Ile Ile Gly
 1 5 10 15
 Ile Gly Leu Tyr Ile Phe Ser Phe Phe Leu Ala Gln Asn Gln Gly Leu
 20 25 30
 Ser Tyr Lys Ser His Cys Arg Asn Phe Ser Ala Val Phe Ile Ser Leu
 35 40 45
 Gly Val Leu Cys Leu Met Gly Tyr Leu Val His Tyr Val Ser Lys His
 50 55 60
 Tyr Leu Gly Ile
 65

<210> 7143
 <211> 60
 <212> PRT
 <213> S.epidermidis

<400> 7143
 Leu Leu Tyr Tyr Ser Lys Lys Val Lys Ser Asn Gly Leu Ser Gly Ala
 1 5 10 15
 Ile Ser Gly Gly Ala Glu Gln Leu Phe Gly Lys Gln Lys Gln Arg Gly
 20 25 30
 Val Asp Leu Phe Leu His Arg Leu Thr Ile Ile Leu Ala Ile Leu Phe
 35 40 45
 Phe Val Leu Met Phe Cys Ile Ser Tyr Leu Gly Met
 50 55 60

<210> 7144
 <211> 60
 <212> PRT
 <213> S.epidermidis

<400> 7144
 Lys Thr His Tyr Ile Glu Leu Tyr Phe Ile Thr Ile Tyr Leu Ile Asn
 1 5 10 15
 Ile Lys Lys Ser Asn Glu Ile Cys Leu Ile Asn Ser Asp Ile Ser Thr
 20 25 30
 Phe Phe Asn Lys Cys Ser Glu Gln Tyr Ile Ile Leu Thr Met Leu Gln
 35 40 45
 Asp Asn Asn Lys Ala His Lys Val Lys Tyr Phe Cys
 50 55 60

<210> 7145
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 7145

Ile Met Asn Leu Ile Val Asp Val Leu Leu Leu Met Lys Asn Lys Lys
 1 5 10 15
 Met Thr Asn Val Ile Asn Ile Ser Lys Asp Lys Leu Trp Asp Arg Thr
 20 25 30
 Pro Ser Glu Phe Tyr Pro Thr Phe Cys Phe Ile
 35 40

<210> 7146

<211> 47

<212> PRT

<213> S.epidermidis

<400> 7146

Asn Lys His Tyr Phe Trp Phe Val Tyr Cys Phe Ile Ser Lys Asn Lys
 1 5 10 15
 Val Asn Gln Phe Asn Lys Leu Lys Asn Arg Arg Leu Ser Leu Ile Leu
 20 25 30
 Lys Tyr Met Ile Leu His Lys Cys Tyr Tyr Lys Lys Asn His Ser
 35 40 45

<210> 7147

<211> 115

<212> PRT

<213> S.epidermidis

<400> 7147

Ile Met Asn Leu Ile Leu Leu Leu Val Ile Gly Phe Leu Val Phe Ile
 1 5 10 15
 Gly Thr Tyr Met Ile Leu Ser Ile Asn Leu Ile Arg Ile Val Ile Gly
 20 25 30
 Ile Ser Ile Tyr Thr His Ala Gly Asn Leu Ile Ile Met Ser Met Gly
 35 40 45
 Lys Tyr Gly Pro His Met Ser Glu Pro Leu Ile Gln Gly His Ala Gln
 50 55 60
 Asn Phe Val Asp Pro Leu Leu Gln Ala Ile Val Leu Thr Ala Ile Val
 65 70 75 80
 Ile Gly Phe Gly Met Thr Ala Phe Leu Leu Val Leu Ile Tyr Arg Thr
 85 90 95
 Tyr Arg Val Thr Lys Glu Asp Glu Ile Ser Ala Leu Lys Gly Asp Glu
 100 105 110
 Asp Asp Glu
 115

<210> 7148

<211> 47

<212> PRT

<213> S.epidermidis

<400> 7148

Leu Lys Asn Tyr Ser Leu Met Asp Ser Ile Leu Tyr Lys Ile Lys Phe
 1 5 10 15
 Tyr Ser Leu Leu Asp Ile Asn Lys Asn Ser Tyr Leu Phe Val Ile Cys
 20 25 30
 Gln Phe Arg Lys Lys Ala Thr Val Leu Glu Ser Met Tyr Ala Gln

35

40

45

<210> 7149
 <211> 82
 <212> PRT
 <213> S.epidermidis

<400> 7149

Trp	Ile	Cys	Tyr	Lys	Tyr	Leu	Val	Gln	Lys	His	Val	Glu	Val	Phe	Tyr
1				5					10					15	
Met	Asn	Asn	Gly	Thr	Val	Lys	Trp	Phe	Asn	Ala	Glu	Lys	Gly	Phe	Gly
			20					25					30		
Phe	Ile	Glu	Arg	Glu	Asn	Gly	Gly	Asp	Val	Phe	Val	His	Phe	Ser	Ala
		35					40					45			
Ile	Val	Glu	Asp	Gly	Tyr	Lys	Ser	Leu	Glu	Glu	Gly	Gln	Ser	Val	Glu
	50					55					60				
Phe	Asp	Ile	Val	Glu	Gly	Glu	Arg	Gly	Glu	Gln	Ala	Ala	Asn	Val	Val
65					70					75					80
Lys	Met														

<210> 7150
 <211> 144
 <212> PRT
 <213> S.epidermidis

<400> 7150

His	Tyr	Cys	Tyr	Lys	Arg	Ser	Cys	Phe	Lys	Trp	Phe	Phe	Gly	His	Cys
1				5					10					15	
Ser	Leu	Ala	Ile	Asp	His	Asp	Thr	Val	Leu	Gln	Ile	Glu	Gly	Pro	Gly
			20					25					30		
Asp	Lys	Pro	Met	Thr	Glu	Asp	Phe	Glu	Ser	Tyr	Arg	Asp	Arg	Tyr	Gly
		35					40					45			
Lys	Gly	Lys	Asn	Glu	Trp	Ile	Lys	Val	Tyr	Arg	Cys	Ser	His	Pro	Asn
	50					55					60				
Ala	Gly	Thr	Lys	Ala	Ala	Gln	Trp	Ala	Lys	Lys	His	Tyr	Glu	Asn	Ser
65					70					75					80
Asp	Ser	Glu	Tyr	Leu	Val	Thr	Phe	Asn	Leu	Lys	Ser	Glu	Thr	Phe	Thr
				85					90					95	
Tyr	Cys	Thr	Lys	Ile	Ile	Tyr	Gln	Ala	Tyr	Lys	Tyr	Gly	Val	Asp	Lys
			100					105					110		
Asn	Ser	Val	Ser	Asp	His	Gly	Leu	Tyr	Ile	Ile	Ser	Pro	Tyr	Ala	Leu
		115					120					125			
Thr	Asp	Asn	Phe	Thr	Asp	Glu	Tyr	Lys	Leu	Lys	Leu	Val	Lys	Thr	Tyr
		130					135					140			

<210> 7151
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 7151

Ile	Gln	Ser	Tyr	Phe	Val	Phe	Glu	Ile	Ile	Leu	His	Leu	Arg	Ile	Phe
1				5					10					15	
Phe	Asp	Tyr	Phe	Arg	Thr	Arg	Asn	Pro	Ile	Thr	Leu	Val	Gln	Tyr	Tyr
			20					25					30		

Asn Leu Val Asn Lys Tyr Ile Gly Gly Glu Ser His Val His His
 35 40 45

<210> 7152
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 7152
 Asn Cys Gly Tyr Val Asn Phe Val Ile Phe Ser Ser Arg Asp Lys Thr
 1 5 10 15
 Gly Cys Trp Arg Thr Ser Ile Asn Asp Tyr Tyr Ile Leu Asn Leu His
 20 25 30
 Asn Phe Tyr Asn Ile Arg Ile Ala Ser Tyr Phe Leu
 35 40

<210> 7153
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 7153
 Pro Gln Phe Tyr Leu Gln Ile Leu Asn Lys Leu Asp Ile Lys Phe Leu
 1 5 10 15
 His Lys Cys Leu Ile Ile Leu Leu Lys Met Met Ser Asp Lys Ile Met
 20 25 30
 Glu Thr Leu Leu Ser Thr Pro Thr Leu Lys
 35 40

<210> 7154
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 7154
 Ile Gln Val Leu Phe His Leu Ser His Arg Leu Pro Ile Tyr Asn Lys
 1 5 10 15
 Ile Leu Arg Gln Asn Leu Val Ser Gln Asp Phe Val Ile Tyr Tyr Leu
 20 25 30
 Ile Lys Lys Phe His Phe Val Ser Ile His Phe Tyr Tyr Phe Phe
 35 40 45

<210> 7155
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7155
 Ser Lys Val Leu Met Trp Asp Ile Lys Asn Lys Phe Ala Ile Asn Phe
 1 5 10 15
 Lys Ile Ile Gly Met Leu Thr Ile Leu Glu Lys Lys Gly Gly Ser Tyr
 20 25 30
 Glu Lys Thr Ile Ile His Ser Leu Phe
 35 40

<210> 7156

<211> 50
 <212> PRT
 <213> S.epidermidis

<400> 7156
 Gln Pro Asn Tyr Asn Pro Asn Asn Lys Tyr Leu Asn Met Ser Asn Gln
 1 5 10 15
 Glu Trp Arg Asn Lys Thr Arg Asn Arg Leu Ser Ser Ser Glu Met Gln
 20 25 30
 Ile Arg Asp Glu Ile Leu Asn Asp Asn Tyr Glu Glu Ile Thr His Arg
 35 40 45
 Lys Phe
 50

<210> 7157
 <211> 72
 <212> PRT
 <213> S.epidermidis

<400> 7157
 Val Met Leu Tyr Ser Leu His Ile Lys His Leu Val Lys Leu Val Tyr
 1 5 10 15
 Trp Tyr Leu Leu Asn Tyr Thr Lys Gly Pro Tyr Phe Leu Lys Tyr Phe
 20 25 30
 Asn Ile Lys Leu His Ile Ser Thr Lys Tyr Phe Gly Glu Thr Leu Glu
 35 40 45
 Arg Thr Gly Gln Ala Glu Asp Tyr Arg Leu Lys Leu Ser Asp Lys Lys
 50 55 60
 Ala Ser Gln Gln Tyr Glu Val Leu
 65 70

<210> 7158
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7158
 Phe Thr Ile Tyr Leu Ser Asp Phe Tyr Phe Leu Tyr Phe Tyr Lys Val
 1 5 10 15
 Phe Lys Val Glu Phe Leu Glu Asp Leu Thr Leu Cys Phe Asn Lys Cys
 20 25 30
 Asn Glu Leu Leu Trp Leu Ile Val
 35 40

<210> 7159
 <211> 69
 <212> PRT
 <213> S.epidermidis

<400> 7159
 Asp Tyr Gln Tyr Val Ile Leu Cys Ile Leu Leu Met Met Asn Asn Asp
 1 5 10 15
 Glu Gln Gln Lys Asn Glu Ser Val Cys Phe Thr Tyr Tyr Ile Ser Val
 20 25 30
 Gln Thr Pro Lys Val Leu Leu Ile Leu Gln Lys Leu Leu Tyr His Val
 35 40 45

Lys Asn Arg Val Lys Met Thr Phe Leu Gln Asn Leu Tyr Lys Lys Pro
 50 55. 60
 Arg Pro Ser Thr His
 65

<210> 7160
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 7160
 Tyr Pro Gln Tyr Pro Ile Asn Thr Arg Phe Tyr Lys Lys Pro Lys Pro
 1 5 10 15
 Ser Lys Ile Ile His Glu Leu Ser Ile Leu Tyr Gln Leu Trp Phe Gln
 20 25 30
 Leu His Tyr Pro Cys Gln Phe Leu Ile Ile Phe Phe Leu Ile Tyr
 35 40 45

<210> 7161
 <211> 185
 <212> PRT
 <213> S.epidermidis

<400> 7161
 Thr Glu Gly Tyr Lys Met Lys Leu Lys Leu Leu Gly Thr Leu Ala Leu
 1 5 10 15
 Ser Ser Ile Ile Leu Thr Ala Cys Gly Gln Glu Asn Val Lys Lys Thr
 20 25 30
 Glu Ser Asn Pro Lys Glu Glu Gln Asn Lys Thr Asp Asn Met Gln Thr
 35 40 45
 Asn Gly Ser Val Thr Asn Ser Asn Ser Asn Gln Lys Gln Lys Thr Ala
 50 55 60
 Gln Lys Gln Ile Ser Ala Gln Glu Ala Glu Gln Ile Val Ser Asn Tyr
 65 70 75 80
 Tyr Ile Asn Lys Gly Ile Asn Lys Gln Gln Val Leu Glu Phe Lys Thr
 85 90 95
 Asn Ile Asp Arg Ser Asn Ala Asn Glu Tyr Tyr Val Glu His Leu Val
 100 105 110
 Arg Asp Ala Ala Gly Thr Pro Ile Lys Phe Cys Ala Val Val Asn Lys
 115 120 125
 Ser Thr Gly Glu Val Ile Asn Arg Phe Asn Asp Met Asn Glu Glu Glu
 130 135 140
 Met Lys Glu Phe Glu Glu Phe Lys Lys Arg Ser Pro Lys Tyr His Asn
 145 150 155 160
 Ser Gly Glu Glu Lys Asn Lys Met Gln Glu Asn Ser Ser Ser Ser Glu
 165 170 175
 Gln Gln Glu Val His Asn Ser Val Ile
 180 185

<210> 7162
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7162
 Ile Asp Leu Tyr Ile Ile Asp Tyr Asn Ile Ala Glu Val Glu Leu Arg

3235

1		5		10		15									
Ile	Leu	Ile	Ser	Leu	Leu	Asn	Lys	Val	Ile	Met	Ile	Asn	Arg	Ile	Arg
		20						25					30		
Val	Thr	Asn	Thr	His	Met	Tyr	Ser								
		35					40								

<210> 7163
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 7163															
Asn	Phe	Met	Tyr	His	Ile	Asn	Tyr	Arg	Tyr	Ser	Ile	Ser	Glu	Ala	Leu
1				5					10					15	
Met	Pro	Leu	Phe	Leu	Ile	Val	Phe	Lys	Asn	Tyr	Tyr	Leu	Ile	Glu	Leu
		20						25					30		
Phe	Phe	Thr	Leu	Ala	Leu	Phe	Leu	Phe	Ser	Cys	Phe	Ile	His	Leu	Leu
		35					40					45			
Ile	Ser	Met	Ile												
		50													

<210> 7164
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 7164															
Ser	Gly	Ala	Tyr	Tyr	Leu	Ala	Gln	Cys	Ile	Ser	Ile	Ser	Arg	Cys	Tyr
1				5					10					15	
Ser	Thr	Arg	Ile	Tyr	Val	Lys	Leu	His	Lys	Ile	Asp	Thr	Arg	Glu	Pro
		20						25					30		
Val	Thr	Tyr	Leu	Tyr	Val	Gln	Ala	Leu	Thr	Leu	Phe	Ser	Pro	Tyr	Tyr
		35					40					45			

<210> 7165
 <211> 72
 <212> PRT
 <213> S.epidermidis

<400> 7165															
Val	Phe	Lys	Tyr	Ser	Phe	Lys	Glu	Gly	Asn	Ile	Met	Lys	Met	Asn	Pro
1				5					10					15	
Arg	Tyr	Val	Lys	Val	Phe	Phe	Leu	Tyr	Leu	Val	Ser	Thr	Phe	Ile	Ser
		20						25					30		
Asn	Arg	Leu	Thr	Thr	Asn	Lys	Ser	Leu	Cys	Lys	Thr	Leu	Met	Gln	Gly
		35					40					45			
Ile	Leu	Gly	Tyr	Gly	Leu	Phe	Ala	Leu	Gly	Leu	Lys	Tyr	Leu	Thr	Ile
	50					55					60				
Lys	Lys	Lys	Gln	His	Gln	Ala	Gln								
65					70										

<210> 7166
 <211> 722
 <212> PRT
 <213> S.epidermidis

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2015. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

<400> 7166

```

Ser Leu Lys Tyr Lys Gly Gln Ile Lys Thr Leu Leu Asn Leu Arg Ile
1      5      10      15
Arg Trp Ala Ile Ser Met Lys Thr Met Glu Glu Lys Lys Tyr Asn His
20      25      30
Ile Glu Leu Asn Asn Glu Val Thr Lys Arg Lys Asp Asn Gly Phe Phe
35      40      45
Asp Leu Glu Lys Asp Gln Glu Ala Leu Lys Val Tyr Leu Glu Glu Ile
50      55      60
His Asp Lys Met Ile Ser Phe Asp Asp Glu Ile Glu Arg Leu His Tyr
65      70      75      80
Leu Val Asp Asn Asn Phe Tyr Phe Asn Val Phe Glu Lys Tyr Ser Glu
85      90      95
Ala Glu Leu Ile Glu Ile Thr Glu Tyr Ala Lys Ser Ile His Phe Gln
100     105     110
Phe Ala Ser Tyr Met Ser Ala Ser Lys Phe Tyr Lys Asp Tyr Ala Leu
115     120     125
Lys Thr Asn Asp Lys Thr Lys Phe Leu Glu Asp Tyr Asn Gln His Val
130     135     140
Ala Ile Val Ala Leu Tyr Leu Ala Asn Gly Asn Val Lys Gln Ala Lys
145     150     155     160
Gln Phe Ile Ser Ala Met Val Glu Gln Arg Tyr Gln Pro Ala Thr Pro
165     170     175
Thr Phe Leu Asn Ala Gly Arg Ala Arg Arg Gly Glu Leu Val Ser Cys
180     185     190
Phe Leu Leu Glu Val Asp Asp Ser Leu Asn Ser Ile Asn Phe Ile Asp
195     200     205
Ser Thr Ala Lys Gln Leu Ser Lys Ile Gly Gly Gly Val Ala Ile Asn
210     215     220
Leu Ser Lys Leu Arg Ala Arg Gly Glu Ala Ile Lys Gly Ile Lys Gly
225     230     235     240
Val Ala Lys Gly Val Leu Pro Val Ala Lys Ala Leu Glu Gly Gly Phe
245     250     255
Ser Tyr Ala Asp Gln Leu Gly Gln Arg Pro Gly Ala Gly Ala Val Tyr
260     265     270
Leu Asn Ile Phe His Tyr Asp Val Glu Glu Phe Leu Asp Thr Lys Lys
275     280     285
Val Asn Ala Asp Glu Asp Leu Arg Leu Ser Thr Ile Ser Thr Gly Leu
290     295     300
Ile Val Pro Ser Lys Phe Phe Asp Leu Ala Lys Glu Gly Lys Asp Phe
305     310     315     320
Tyr Met Phe Ala Pro His Thr Val Lys Gln Glu Tyr Gly Val Thr Leu
325     330     335
Asp Asp Ile Asp Leu Glu Lys Tyr Tyr Asp Asp Met Val Ala Asn Pro
340     345     350
Asn Ile Asp Lys Lys Lys Lys Asp Ala Arg Glu Met Leu Asn Met Ile
355     360     365
Ala Gln Thr Gln Leu Gln Ser Gly Tyr Pro Tyr Leu Met Phe Lys Asp
370     375     380
Asn Ala Asn Lys Val His Ala Asn Ser Asn Ile Gly Gln Ile Lys Val
385     390     395     400
Ser Asn Leu Cys Thr Glu Ile Phe Gln Leu Gln Glu Thr Ser Val Ile
405     410     415
Asn Asp Tyr Gly Ile Glu Asp Glu Ile Lys Arg Asp Ile Ser Cys Asn
420     425     430
Leu Gly Ser Leu Asn Ile Val Asn Val Met Glu Ser Gly Lys Phe Arg

```

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400


```

      435              440              445
Asp Ser Val Phe Thr Gly Met Asp Ala Leu Thr Val Val Ser Asp Glu
  450              455              460
Ala Asn Ile Gln Asn Ala Pro Gly Val Lys Lys Ala Asn Ser Glu Leu
  465              470              475              480
His Ser Val Gly Leu Gly Val Met Asn Leu His Gly Tyr Leu Ala Lys
              485              490              495
Asn Lys Ile Gly Tyr Glu Ser Glu Glu Ala Lys Asp Phe Ala Asn Ile
              500              505              510
Phe Phe Met Ile Met Asn Tyr Tyr Ser Ile Glu Arg Ser Met Glu Ile
              515              520              525
Ala Lys Glu Arg Gly Glu Lys Tyr Gln Asp Phe Glu Gln Ser Asp Tyr
              530              535              540
Ala Asn Gly Lys Tyr Phe Glu Phe Tyr Thr Ser Gln Glu Phe Glu Pro
  545              550              555              560
Lys Phe Glu Lys Val Arg Gln Leu Phe Asp Gly Ile Asp Ile Pro Thr
              565              570              575
Ser Asn Asp Trp Lys Glu Leu Gln Asn Lys Val Glu Gln Tyr Gly Leu
              580              585              590
Tyr His Ala Tyr Arg Leu Ala Ile Ala Pro Thr Gln Ser Ile Ser Tyr
              595              600              605
Val Gln Asn Ala Thr Ser Ser Val Met Pro Ile Val Asp Gln Ile Glu
              610              615              620
Arg Arg Thr Tyr Gly Asn Ala Glu Thr Phe Tyr Pro Met Pro Phe Leu
  625              630              635              640
Ser Pro Glu Thr Met Trp Tyr Tyr Lys Ser Ala Phe Asn Thr Asp Gln
              645              650              655
Met Lys Leu Ile Asp Leu Val Ala Thr Ile Gln Thr His Val Asp Gln
              660              665              670
Gly Ile Ser Thr Ile Leu Tyr Val Asn Ser Glu Ile Ser Thr Arg Glu
              675              680              685
Leu Ser Arg Leu Tyr Val Tyr Ala His His Lys Gly Leu Lys Ser Leu
              690              695              700
Tyr Tyr Thr Arg Asn Lys Leu Leu Ser Val Glu Glu Cys Thr Ser Cys
  705              710              715              720
Ala Ile

```

<210> 7167

<211> 215

<212> PRT

<213> S.epidermidis

<400> 7167

```

Met Leu Asp Phe Ile Asn His Leu Leu Ser Tyr Gln Phe Leu Asn Arg
1              5              10              15
Ala Leu Ile Thr Ser Ile Leu Val Gly Ile Val Cys Gly Thr Met Gly
              20              25              30
Ser Ile Ile Val Leu Arg Gly Leu Ser Leu Met Gly Asp Ala Met Ser
              35              40              45
His Ala Val Leu Pro Gly Val Ala Leu Ser Phe Leu Phe Asn Ile Pro
              50              55              60
Met Phe Ile Gly Ala Leu Val Thr Gly Met Leu Ala Ser Leu Phe Ile
  65              70              75              80
Gly Phe Ile Thr Ser Asn Ser Lys Thr Lys Pro Asp Ala Ala Ile Gly
              85              90              95

```

Ile Ser Phe Thr Ala Phe Leu Ala Ser Gly Val Ile Ile Ile Ser Leu
 100 105 110
 Ile Asn Ser Thr Thr Asp Leu Tyr His Ile Leu Phe Gly Asn Leu Leu
 115 120 125
 Ala Ile Thr His Gln Ser Phe Trp Thr Thr Ile Val Ile Thr Val Leu
 130 135 140
 Val Ile Leu Leu Ile Ile Ile Phe Tyr Arg Pro Leu Met Ile Ser Thr
 145 150 155 160
 Phe Asp Ala Thr Phe Ser Arg Met Ser Gly Leu Asn Thr Thr Leu Ile
 165 170 175
 His Tyr Phe Val Met Leu Leu Leu Arg Thr Cys Asn Cys Cys Glu His
 180 185 190
 Thr Asn Ser Trp Asn Tyr Pro Cys Ser Cys Phe Thr Asn His Ser Ser
 195 200 205
 Phe Tyr Ser Phe Phe Asn Gln
 210 215

<210> 7168

<211> 343

<212> PRT

<213> S.epidermidis

<400> 7168

Ile Ile Asp Leu His Trp Phe Lys Thr Leu Tyr Phe Ile His Lys Tyr
 1 5 10 15
 Asp Arg Arg Ile Leu Met Lys Ala Val Asn Trp Asn Thr Gln Glu Asp
 20 25 30
 Met Thr Asn Met Phe Trp Arg Gln Asn Ile Ser Gln Met Trp Val Glu
 35 40 45
 Thr Glu Phe Lys Val Ser Lys Asp Ile Ala Ser Trp Lys Thr Leu Thr
 50 55 60
 Asp Ser Glu Lys Asn Thr Phe Lys Lys Ala Leu Ala Gly Leu Thr Gly
 65 70 75 80
 Leu Asp Thr His Gln Ala Asp Asp Gly Met Pro Leu Ile Met Leu His
 85 90 95
 Thr Thr Asp Leu Arg Lys Lys Ala Val Tyr Ser Phe Met Ala Met Met
 100 105 110
 Glu Gln Ile His Ala Lys Ser Tyr Ser His Ile Phe Thr Thr Leu Leu
 115 120 125
 Pro Ser Ser Glu Thr Asn Tyr Leu Leu Asp Thr Trp Val Ile Glu Glu
 130 135 140
 Pro His Leu Lys Tyr Lys Ser Asp Lys Ile Val Glu Asn Tyr His Lys
 145 150 155 160
 Leu Trp Gly Lys Glu Ala Ser Ile Tyr Asp Gln Tyr Ile Ala Arg Val
 165 170 175
 Ser Ser Val Phe Leu Glu Thr Phe Leu Phe Tyr Ser Gly Phe Tyr Tyr
 180 185 190
 Pro Leu Tyr Leu Ala Gly Gln Gly Lys Met Thr Thr Ser Gly Glu Ile
 195 200 205
 Ile Arg Lys Ile Leu Leu Asp Glu Ser Ile His Gly Val Phe Thr Gly
 210 215 220
 Leu Asp Ala Gln Ser Leu Arg Asn Glu Leu Ser Glu Ser Glu Lys Gln
 225 230 235 240
 Lys Ala Asp Gln Glu Met Tyr Lys Leu Leu Asn Glu Leu Tyr Asp Asn
 245 250 255
 Glu Val Ser Tyr Thr His Leu Leu Tyr Asp Asp Ile Gly Leu Ala Glu

Phe Pro Ile Pro Asp Lys Pro Phe Phe Thr Ala Arg Leu Val Gln Gln
 100 105 110
 Lys Lys Asn Ile Asp Lys Val Ile Ile Thr Asn Lys Thr Thr Glu Arg
 115 120 125
 Asp Tyr Leu Thr His Asn His Phe Thr Asp Leu Ile Leu Ile Tyr Asp
 130 135 140
 Glu Asp Gly Lys Ile Leu Glu Phe Asp Ile Gly Asn Val Met Ile Gln
 145 150 155 160
 Glu Arg Asp Lys Leu Tyr Thr Pro Thr Tyr Lys Gly Asp Met Leu Pro
 165 170 175
 Gly Cys Met Arg Gln Ser Leu Ile Asp Gln Gly Lys Val Ile Glu Lys
 180 185 190
 Asp Phe Tyr Ile Glu Glu Phe Lys Glu Lys Ile Lys Ser Ser Gln Ile
 195 200 205
 Asn Val Tyr Leu Ile Asn Ser Leu Arg Glu Val Val Gly Val Lys Val
 210 215 220
 Tyr Val
 225

<210> 7172

<211> 378

<212> PRT

<213> S.epidermidis

<400> 7172

Gln Ile Val Gln Arg Lys Gly Cys His Leu Met Lys Ile Arg Val Ile
 1 5 10 15
 Val Pro Cys Tyr Asn Glu Gly Glu Val Val Leu Lys Thr Tyr Asp Lys
 20 25 30
 Leu Thr Glu Ile Met Lys Lys Asp Ser Leu Ile Lys Asn Tyr Glu Tyr
 35 40 45
 Asp Leu Leu Phe Ile Asn Asp Gly Ser Thr Asp Thr Thr Ile His His
 50 55 60
 Ile Lys Asn Ile Val Ala Tyr Asp Asn His Val Lys Tyr Leu Ser Phe
 65 70 75 80
 Ser Arg Asn Phe Gly Lys Glu Ala Ala Met Ile Ala Gly Tyr Gln His
 85 90 95
 Ser Thr Met His Asp Ala Val Ile Met Ile Asp Gly Asp Leu Gln His
 100 105 110
 Pro Pro Glu Tyr Ile Pro Gln Met Ile Glu Gly Tyr Ile Glu Gly Tyr
 115 120 125
 Asp Gln Val Val Ala Lys Arg Asn Arg Gln Gly Glu Asn Phe Val Arg
 130 135 140
 Lys Thr Leu Ser Arg Cys Tyr Tyr Lys Leu Ile Asn Ala Phe Val Glu
 145 150 155 160
 Asp Ile Gln Phe Glu Asp Gly Val Gly Asp Phe Arg Leu Leu Ser Arg
 165 170 175
 Arg Ala Val Gln Ala Leu Thr Thr Leu Asp Glu Tyr Asn Arg Phe Ser
 180 185 190
 Lys Gly Leu Phe Glu Trp Ile Gly Tyr Glu Thr Lys Val Phe Lys Tyr
 195 200 205
 Glu Asn Val Thr Arg Glu Asp Gly Glu Ser Lys Trp Thr Phe Arg Lys
 210 215 220
 Leu Leu Asn Tyr Gly Ile Asp Gly Leu Ile Ser Phe Asn Asn Lys Pro
 225 230 235 240
 Leu Arg Met Met Ile Tyr Leu Gly Met Phe Thr Phe Ser Ile Ser Ile

3241

				245					250					255			
Leu	Tyr	Ile	Ile	Tyr	Leu	Leu	Ile	Asn	Ile	Leu	Ile	Asn	Gly	Ile	Asn		
			260					265					270				
Ile	Pro	Gly	Tyr	Phe	Thr	Thr	Ile	Ala	Ala	Ile	Leu	Leu	Leu	Gly	Gly		
		275					280					285					
Ile	Gln	Leu	Met	Ser	Ile	Gly	Val	Val	Gly	Glu	Tyr	Ile	Gly	Arg	Ile		
	290					295					300						
Tyr	Tyr	Glu	Val	Lys	His	Arg	Pro	Lys	Tyr	Ile	Val	Glu	Asn	Ser	Asn		
305					310					315					320		
Ile	Gln	Thr	Glu	Asn	Leu	Asp	Met	Arg	Tyr	Asn	Ala	Leu	Asn	Leu	Asn		
				325					330					335			
Lys	Asn	Arg	Asn	Asn	Lys	Arg	Ser	Asn	Asp	Leu	Tyr	Lys	Leu	Ser	Ser		
			340					345					350				
Phe	Tyr	Lys	Val	Lys	Thr	Tyr	Ser	Asp	Thr	Tyr	Ala	Ser	Asn	Tyr	Ser		
		355				360						365					
Gln	Asp	Glu	Gly	Phe	Lys	Glu	Arg	Val	His								
	370					375											

<210> 7173
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 7173
 Trp Lys Ala His Phe Leu Asn Ser Gln Ser Leu Asp Lys Lys Glu Asn
 1 5 10 15
 Ile Pro Arg Ser Ser Asn Asn Val Ile Leu Cys Thr Leu Thr Phe Lys
 20 25 30
 Ile Phe Met Lys Gly Asp Tyr Tyr Glu Lys Ile Gln Met Asp Lys Tyr
 35 40 45
 Ile

<210> 7174
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7174
 Tyr Lys Cys His Leu Ser Leu Gln Ser Asp Leu Gln Leu Phe Asn Ile
 1 5 10 15
 Asn Arg Asn Val Cys Phe Ile Gln His His Lys Leu Ser Lys Ala Leu
 20 25 30
 Tyr Ile Ser Val Tyr Asn His Ile Ser
 35 40

<210> 7175
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7175
 Asn Tyr Ser His Asn Gly Arg Ile Ile Asn Ser Ile Ser Glu Gly Ile
 1 5 10 15
 Ser Thr Thr Leu Ser Thr Phe Ile Thr Lys Arg His Lys Asp Lys Thr
 20 25 30

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2015. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

Gly Ile Ile Lys Phe Ser Ile His
35 40

<210> 7176
<211> 74
<212> PRT
<213> S.epidermidis

<400> 7176
Asn Gly Phe His Cys Lys Ser Val Glu Asp Ile Thr Glu Thr Gln Ala
1 5 10 15
Ile Ala Asn Asn Glu Val Lys Gly Lys Asp Leu Ile Lys His Ile Lys
20 25 30
Ile Thr Leu Gly Asp Phe Lys Asp Phe Gln Val Lys His Asp Phe Asp
35 40 45
Asp Ala Asn Leu Leu Asn Met Ile Ala Pro Val Ala Thr Met Ala Ser
50 55 60
Lys Val Lys Asp Met Pro Ser Asp Cys Tyr
65 70

<210> 7177
<211> 86
<212> PRT
<213> S.epidermidis

<400> 7177
Ala Val Leu His Leu Thr Pro Phe Ala Arg Phe Glu Ala Pro Thr Pro
1 5 10 15
Arg Ile Asp Glu Asp Thr Thr Cys Val Asp Asn Gly Lys Cys Asn
20 25 30
Asp Asp Ala Thr Lys Ile Val Asn Ala Glu Glu Ile Ser Ala Ala Ala
35 40 45
Pro Leu Ala Gly Leu Ile Phe Ile Ile Phe Pro Pro Thr Val Leu Met
50 55 60
Ile Phe Gln Pro Pro Thr Ala Val Pro Asn Pro Ile Ala Val Ala His
65 70 75 80
Ala Thr Leu Thr His Thr
85

<210> 7178
<211> 40
<212> PRT
<213> S.epidermidis

<400> 7178
Ile Gln Ser His Pro Phe Tyr Val Tyr Ile Ile Gln Lys Ile Ser Asn
1 5 10 15
Glu Ser Lys Asn Glu Ile Ser Glu Ile Val Lys Gln Pro Asn Ile Gln
20 25 30
Pro His Pro Glu Cys Val Gln Pro
35 40

<210> 7179
<211> 375
<212> PRT
<213> S.epidermidis

<400> 7180

Gly Val Thr His Met Asn Ile Thr Leu Gly Tyr Ile Asp Pro Val Ala
 1 5 10 15
 Phe Ser Leu Gly Pro Ile Gln Val Arg Trp Tyr Gly Ile Ile Ile Ala
 20 25 30
 Cys Gly Ile Leu Leu Gly Tyr Phe Ile Ala Gln Ala Ala Leu Lys Gln
 35 40 45
 Val Gly Leu His Lys Asp Thr Leu Ile Asp Ile Ile Phe Tyr Ser Ala
 50 55 60
 Ile Val Gly Phe Ile Val Ala Arg Ile Tyr Phe Val Thr Phe Gln Trp
 65 70 75 80
 Pro Tyr Tyr Met Asn His Leu Ser Glu Ile Pro Lys Ile Trp His Gly
 85 90 95
 Gly Ile Ala Ile His Gly Gly Leu Ile Gly Gly Leu Ile Ser Gly Ile
 100 105 110
 Ile Val Cys Lys Ile Lys Asn Leu His Pro Phe Gln Ile Gly Asp Ile
 115 120 125
 Val Ala Pro Ser Ile Ile Leu Ala Gln Gly Ile Gly Arg Trp Gly Asn
 130 135 140
 Phe Met Asn His Glu Ala His Gly Gly Pro Val Ser Arg Ala Phe Leu
 145 150 155 160
 Glu His Leu His Leu Pro Asp Phe Ile Ile Arg Asn Met Tyr Ile Glu
 165 170 175
 Gly Gln Tyr Tyr His Pro Thr Phe Leu Tyr Glu Ser Ile Trp Asp Val
 180 185 190
 Ile Gly Phe Val Ile Leu Ile Thr Leu Arg Lys Arg Leu Lys Leu Gly
 195 200 205
 Glu Thr Phe Phe Gly Tyr Leu Ile Trp Tyr Ser Val Gly Arg Phe Phe
 210 215 220
 Val Glu Ala Met Arg Thr Asp Ser Leu Met Leu Thr Ser His Ile Arg
 225 230 235 240
 Val Ala Gln Leu Val Ser Val Val Leu Ile Met Ile Ser Val Ile Phe
 245 250 255
 Val Ile Tyr Arg Arg Val Lys Tyr Gln Pro Ile Lys Tyr Glu Asn Ser
 260 265 270
 Gly Pro Leu Thr Trp Pro Ile Lys Lys Ala Lys
 275 280

<210> 7181

<211> 351

<212> PRT

<213> S.epidermidis

<400> 7181

Gly Val Ala His Met Lys Lys Thr Val Leu Phe Leu Leu Leu Ser Leu
 1 5 10 15
 Val Leu Val Leu Thr Ala Cys Ser Asn Ser Ser Asn Asn Asn Ser Thr
 20 25 30
 Ser Lys Lys Lys Asn Ser Asp Ser Lys Glu Thr Val Thr Ile Lys Asn
 35 40 45
 Ser Phe Glu Ala Ser Gly Lys Glu Asn Asn Gly Ser Asp Lys Lys Lys
 50 55 60
 Ile Ser Asn Thr Val Glu Val Pro Lys Asn Pro Lys Asn Ala Val Val
 65 70 75 80
 Leu Asp Tyr Gly Ala Leu Asp Val Leu Lys Glu Leu Gly Val Ala Asp
 85 90 95

130		135		140
Glu Leu Leu Thr Ile Arg	Gly Ile Gly Glu Glu Thr Ala Asp Val Leu			
145		150		155
Ile Val Tyr Ile Phe Lys	Gly Lys Glu Phe Ile Pro Asp Ser Tyr Thr			160
		165		170
Arg Arg Ile Phe Arg Lys	Leu Gly Tyr Gln His Thr Glu Ser Tyr His			175
		180		185
Lys Leu Lys Gln Glu Leu Thr	Leu Pro Glu Ser Phe Ser Asn Gln Asp			190
		195		200
Ala Asn Glu Phe His Ala	Leu Leu Asp Asn Phe Gly Lys Asn Tyr Phe			205
		210		215
Asn Gly Lys Gly Lys Gln	Arg Tyr Thr Phe Leu Asp Thr Tyr Phe Lys			220
225		230		235
Lys				240

<210> 7183

<211> 260

<212> PRT

<213> S.epidermidis

<400> 7183

Leu Val Lys His Tyr Gln	Ala Tyr Leu Ile Asp Leu Asp Gly Thr Met
1	5 10 15
Tyr Lys Gly Thr Asp Glu	Ile Asp Gly Ala Ala Gln Phe Ile Asp Tyr
	20 25 30
Leu Asn Asn Asn His Ile	Pro His Leu Tyr Val Thr Asn Asn Ser Thr
	35 40 45
Lys Thr Pro Val Gln Val	Thr Glu Lys Leu Arg Glu Met His Ile Asp
	50 55 60
Ala Lys Pro Asp Glu Val	Val Thr Ser Ala Leu Ala Thr Ala Asp Tyr
65	70 75 80
Ile Ser Glu Gln His Pro	Asn Ala Thr Val Tyr Met Ile Gly Gly His
	85 90 95
Gly Leu Ile Thr Ala Leu	Thr Asp Ala Gly Leu Ser Ile Lys Asn Asp
	100 105 110
Glu His Val Asp Tyr Val	Val Ile Gly Leu Asp Glu Lys Val Thr Tyr
	115 120 125
Glu Lys Leu Ser Ile Ala	Thr Leu Ala Val Arg Asn Gly Ala Lys Phe
	130 135 140
Ile Ser Thr Asn Pro Asp	Val Ser Ile Pro Lys Glu Arg Gly Phe Leu
145	150 155 160
Pro Gly Asn Gly Ala Ile	Thr Ser Val Val Ser Val Ser Thr Gly Ile
	165 170 175
Gln Pro Glu Phe Ile Gly	Lys Pro Glu Pro Ile Ile Met Ser Lys Ser
	180 185 190
Leu Asp Ile Leu Gly Leu	Glu Lys Ser Glu Val Ala Met Val Gly Asp
	195 200 205
Leu Tyr Asp Thr Asp Ile	Met Ser Gly Ile Asn Val Gly Ile Asp Thr
	210 215 220
Ile His Val Gln Thr Gly	Val Ser Thr Tyr Glu Asp Ile Gln Ser Lys
225	230 235 240
Glu Ile Pro Pro Thr Tyr	Ser Phe Lys Asp Leu Asn Val Ala Ile Ala
	245 250 255
Glu Leu Glu Lys	
260	

<210> 7184
 <211> 226
 <212> PRT
 <213> S.epidermidis

<400> 7184
 Phe Val Met Gln Ile Leu Leu Val Glu Asp Asp Asn Thr Leu Phe Gln
 1 5 10 15
 Glu Leu Lys Lys Glu Leu Glu Gln Trp Asp Phe Asn Val Val Gly Val
 20 25 30
 Glu Asp Phe Ser His Val Met Glu Thr Phe Glu Thr Phe Asn Pro Glu
 35 40 45
 Ile Val Ile Leu Asp Val Gln Leu Pro Lys Tyr Asp Gly Phe Tyr Trp
 50 55 60
 Cys Arg Lys Met Arg Gln Gln Ser Asn Val Pro Ile Leu Phe Leu Ser
 65 70 75 80
 Ser Arg Asp Asn Pro Met Asp Gln Val Met Ser Met Glu Leu Gly Ala
 85 90 95
 Asp Asp Tyr Met Gln Lys Pro Phe Tyr Thr Asn Val Leu Ile Ala Lys
 100 105 110
 Leu Gln Ala Ile Tyr Arg Arg Val Tyr Glu Phe Gly Val Glu Glu Lys
 115 120 125
 Arg Thr Leu Ser Trp Gln Asp Ala Thr Val Asp Leu Ser Lys Asp Ser
 130 135 140
 Ile Gln Lys Asp Asp Lys Thr Ile Phe Leu Ser Lys Thr Glu Met Ile
 145 150 155 160
 Ile Leu Glu Met Leu Ile Asn Lys Arg Asn Gln Ile Val Thr Arg Asp
 165 170 175
 Thr Leu Ile Thr Ala Leu Trp Asp Asp Glu Ala Phe Val Ser Asp Asn
 180 185 190
 Thr Leu Thr Val Asn Val Asn Arg Leu Arg Lys Lys Leu Ser Glu Ile
 195 200 205
 Asp Met Asp Ser Ala Ile Glu Thr Lys Val Gly Lys Gly Tyr Leu Ala
 210 215 220
 His Glu
 225

<210> 7185
 <211> 51
 <212> PRT
 <213> S.epidermidis

<400> 7185
 Glu Trp Thr Gln Thr Phe Tyr Asn Phe Cys Tyr Leu Ile Lys His Cys
 1 5 10 15
 Trp Ile Leu Ser Arg His Val Thr Cys Leu Leu Ser Glu Gln Leu Phe
 20 25 30
 His Asn His Tyr Tyr Tyr Ile Ile Ile Asp Lys Val Val Lys Ile Tyr
 35 40 45
 Lys Thr Arg
 50

<210> 7186
 <211> 45
 <212> PRT

<213> S.epidermidis

<400> 7186

Phe	Asp	Trp	Gln	Gln	Pro	Phe	Ser	Ile	Asp	Asn	His	Leu	Tyr	Tyr	Lys
1				5					10					15	
Met	Tyr	Ile	Asn	Ile	Ser	Ile	Asn	Asn	Asn	Phe	Ile	Leu	Thr	Arg	Cys
			20				25						30		
Asn	His	Phe	Phe	Leu	Ala	Ile	Lys	His	Val	Phe	Lys	Lys			
		35					40					45			

<210> 7187

<211> 56

<212> PRT

<213> S.epidermidis

<400> 7187

Phe	Ile	Phe	Asn	Lys	Phe	Asn	Ser	Asp	Ser	Asp	Ile	Leu	Ala	Arg	Ile
1				5					10					15	
Ile	Arg	Ser	Leu	Leu	Leu	Ile	Cys	Thr	Ile	Phe	Ser	Phe	Gly	Phe	Glu
			20				25						30		
Gly	Ile	Glu	Leu	Ile	Tyr	Glu	Ile	Leu	Pro	Leu	Ile	Gly	Glu	Asn	Lys
		35					40					45			
Val	Asp	Leu	Ile	Glu	Asp	Leu	Val								
		50					55								

<210> 7188

<211> 228

<212> PRT

<213> S.epidermidis

<400> 7188

Gln	Thr	Phe	Lys	Leu	Thr	Ile	Ile	Phe	Trp	Gln	Gly	Val	Ser	Ser	Asn
1				5					10					15	
Met	Lys	Ala	Thr	Arg	Val	Phe	Asn	Val	Val	Val	Phe	Leu	Gln	Phe	Ser
			20				25						30		
Thr	Tyr	Leu	Leu	Phe	Gly	Met	Asn	Ile	Gln	Leu	Leu	Phe	Asp	Lys	Lys
		35					40					45			
Glu	Ser	Asp	Tyr	Leu	Phe	Phe	Ile	Ile	Pro	Leu	Phe	Phe	Thr	Tyr	Ile
		50				55					60				
Phe	Asp	Asn	Ser	Tyr	Thr	Val	Leu	Ile	Asp	Phe	Cys	Lys	Pro	Thr	Glu
65					70				75					80	
Lys	Leu	Lys	Lys	Val	Glu	Ser	Asn	Asn	Ile	Arg	Phe	Ile	Asn	Ile	Ile
			85					90					95		
Met	Leu	Leu	Ala	Ile	Ile	Ile	Tyr	Ala	Tyr	Ile	Tyr	Lys	Asn	Lys	Lys
			100				105						110		
Ile	Arg	Trp	Phe	Lys	Asp	Leu	Val	Asp	Ser	Ala	Asn	Glu	Asn	Trp	Cys
		115				120						125			
Leu	Ser	Ile	Ile	Leu	Ile	Ile	Met	Ser	Leu	Leu	Ile	Ser	Tyr	Ile	
		130				135					140				
Trp	Ser	Lys	Tyr	Phe	Ile	Lys	Ser	Asp	Tyr	Ile	Glu	Lys	Leu	Lys	Glu
145					150				155					160	
Glu	Asp	Phe	Asp	Ile	Leu	Gly	Ile	Glu	Asn	Val	Ile	Asn	Trp	Leu	Thr
			165					170					175		
Lys	Ser	Asn	Ile	Lys	Ser	Lys	Asp	Ile	Ser	Glu	Gly	Thr	Asn	Val	Glu
			180				185						190		
Ile	Glu	Lys	Ile	Glu	Leu	Leu	Leu	Lys	Asp	Glu	Lys	Asn	Ile	Asp	Asp

Ala Gly Pro Ala Gly Met Thr Ala Ala Val Tyr Ala Ser Arg Ala Asn
 20 25 30
 Leu Lys Thr Val Met Ile Glu Arg Gly Met Pro Gly Gly Gln Met Ala
 35 40 45
 Asn Thr Glu Glu Val Glu Asn Phe Pro Gly Phe Glu Met Ile Thr Gly
 50 55 60
 Pro Asp Leu Ser Thr Lys Met Phe Glu His Ala Lys Lys Phe Gly Gly
 65 70 75 80
 Gly Ile Pro Ile Trp Arg Tyr
 85

<210> 7192

<211> 44

<212> PRT

<213> S.epidermidis

<400> 7192

Leu Gln Phe Asn Asn Ala Thr His Ile Leu Phe Ile Gln Leu Leu Leu
 1 5 10 15
 Gln Arg Ile Asn Glu Leu Lys Phe Val Phe Lys Tyr Thr Lys His His
 20 25 30
 Phe Asn Leu Tyr Phe Phe Ile Asn Val His Phe Leu
 35 40

<210> 7193

<211> 163

<212> PRT

<213> S.epidermidis

<400> 7193

Cys Arg Phe Lys Ile Met Met Thr Ala Asn Asp Trp Ile Asp Arg Leu
 1 5 10 15
 Glu Leu Ile Ser His Pro Glu Gly Gly Tyr Phe Lys Glu Thr Met Arg
 20 25 30
 Gly Asp Gly Lys Gly Arg Ala Ser Phe Ser Ser Ile Tyr Phe Leu Leu
 35 40 45
 Thr Gln Arg Asp Ile Ser His Phe His Arg Ile Asp Ala Asp Glu Val
 50 55 60
 Trp Tyr Tyr His Ala Gly Gln Thr Leu Lys Ile His Met Ile Thr Pro
 65 70 75 80
 Lys Gly Glu Tyr His Thr Val Lys Leu Gly Arg Asp Ile Asp Cys Gly
 85 90 95
 Glu Cys Leu Gln Tyr Cys Val Pro Lys Gly Thr Ile Phe Ala Ser Thr
 100 105 110
 Leu Asp Ser Ala Glu Gly Tyr Ser Leu Val Gly Cys Met Cys Gln Pro
 115 120 125
 Gly Phe Glu Tyr Glu His Phe Glu Leu Leu Thr Gln Glu Tyr Leu Ile
 130 135 140
 Arg Gln Tyr Pro Gln Tyr Glu Ser Ile Ile Lys Arg Leu Ala Ile Ser
 145 150 155 160
 Gln Glu Asp

<210> 7194

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7194

```

Asn Leu Phe Asn Val His Phe Ile Ile Met Ile His Gln Asn Ser Ile
1           5           10           15
Gly Cys Met Thr Pro Arg Asn Ile His Asn Leu Phe Leu Tyr Phe Ala
          20           25           30
Tyr Gly Ser Ile Ile Leu Glu Thr
          35           40

```

<210> 7195

<211> 56

<212> PRT

<213> S.epidermidis

<400> 7195

```

Lys Tyr Phe Leu Ile Lys Thr Phe Ser Ile Phe Phe Tyr Gln Phe Lys
1           5           10           15
Ile Leu Leu Val Asp Phe Asn His Ile Phe Thr Leu Gln Lys Asn Glu
          20           25           30
Ile Glu Ala Leu Ser Ile Lys Asn Thr Ile Asn His Leu Pro Ile Ser
          35           40           45
Ser Ile His Thr Phe Ile Lys Ile
          50           55

```

<210> 7196

<211> 62

<212> PRT

<213> S.epidermidis

<400> 7196

```

Leu Lys Leu Leu Phe Asp Ser Ile Ser Lys Leu Ser Ile Asn Glu Thr
1           5           10           15
Val Gly Asp Gly Ala Glu Ile Asn Asp Val Val Asn Lys Arg Asp Glu
          20           25           30
Tyr Lys Glu Ser Ile Arg Tyr Tyr Asn Asn His Leu Val Leu Val Lys
          35           40           45
Tyr Asn Glu Lys Ser Ile Cys Lys Leu Lys Tyr Leu Arg Asn
          50           55           60

```

<210> 7197

<211> 68

<212> PRT

<213> S.epidermidis

<400> 7197

```

Ile Pro Ile Lys Pro Ser Val Gly Leu Lys Ala Arg Asp Leu Leu Gly
1           5           10           15
Arg Tyr His Ser Leu Phe Thr Glu Lys Val Asp Leu Asn Gly Ala Thr
          20           25           30
Pro Val Phe Ile Asp Ser Ile Asp Glu Asp Asp Glu Lys Asn Glu Arg
          35           40           45
Asp Ile Glu Asn Leu Ser Lys Gln Tyr Pro Asn Ala Lys Phe His Ile
          50           55           60
Asp Asp Ile Arg
          65

```

<210> 7198
 <211> 453
 <212> PRT
 <213> S.epidermidis

<400> 7198

Ser	Thr	Ile	Lys	Tyr	Ile	Asn	Phe	Lys	Glu	Gly	Asp	His	Val	Met	Glu
1			5						10					15	
Leu	Thr	Ile	Tyr	His	Thr	Asn	Asp	Ile	His	Ser	His	Leu	Asn	Glu	Tyr
		20					25					30			
Ala	Arg	Ile	Gln	Ala	Tyr	Met	Ala	Lys	His	Arg	Pro	Gln	Leu	Glu	His
	35					40					45				
Pro	Ser	Leu	Tyr	Ile	Asp	Ile	Gly	Asp	His	Val	Asp	Leu	Ser	Ala	Pro
	50				55					60					
Val	Thr	Glu	Ala	Thr	Val	Gly	His	Lys	Asn	Ile	Glu	Leu	Leu	Asn	Glu
65				70					75					80	
Ala	His	Cys	Asp	Ile	Ala	Thr	Ile	Gly	Asn	Asn	Glu	Gly	Met	Thr	Ile
			85					90					95		
Ser	His	Asp	Ala	Leu	Gln	Asn	Leu	Tyr	Asn	Asp	Ala	Asp	Phe	Lys	Val
		100				105					110				
Ile	Cys	Thr	Asn	Val	Ile	Asp	Glu	Glu	Gly	His	Leu	Pro	His	His	Ile
	115					120					125				
Thr	Ser	Ser	Tyr	Ile	Lys	Glu	Ile	Lys	Gly	Thr	Arg	Ile	Leu	Phe	Val
	130				135					140					
Ala	Ala	Thr	Ala	Pro	Phe	Thr	Pro	Phe	Tyr	Arg	Ala	Leu	Asp	Trp	Ile
145				150					155					160	
Val	Thr	Asp	Pro	Leu	Ala	Ala	Ile	Lys	Asp	Glu	Ile	Asn	Ala	His	Gln
			165					170					175		
Gly	Glu	Tyr	Asp	Leu	Leu	Met	Val	Met	Ser	His	Val	Gly	Ile	Phe	Phe
		180				185						190			
Asp	Glu	Lys	Leu	Cys	Gln	Glu	Ile	Pro	Glu	Ile	Asp	Val	Ile	Phe	Gly
	195					200					205				
Ser	His	Thr	His	His	His	Phe	Glu	His	Gly	Glu	Ile	Asn	Asn	Gly	Val
	210				215						220				
Leu	Met	Ala	Ala	Ala	Gly	Lys	Tyr	Gly	Tyr	Tyr	Leu	Gly	Glu	Val	Asn
225				230					235					240	
Ile	Thr	Ile	Glu	Asn	Gly	Lys	Ile	Val	Asp	Lys	Ile	Ala	Lys	Ile	His
			245					250					255		
Pro	Ile	Glu	Thr	Leu	Pro	Leu	Val	Glu	Thr	His	Phe	Glu	Glu	Glu	Gly
		260				265						270			
Arg	Ala	Leu	Leu	Ser	Lys	Pro	Val	Val	Asn	His	His	Val	Asn	Leu	Val
	275				280						285				
Lys	Arg	Thr	Asp	Val	Val	Thr	Arg	Thr	Ser	Tyr	Leu	Leu	Ala	Glu	Ser
	290				295				300						
Val	Tyr	Glu	Phe	Ser	Arg	Ala	Asp	Cys	Ala	Ile	Val	Asn	Ala	Gly	Leu
305				310					315					320	
Ile	Val	Asn	Gly	Ile	Glu	Ala	Asp	Lys	Val	Thr	Glu	Tyr	Asp	Ile	His
			325					330					335		
Arg	Met	Leu	Pro	His	Pro	Ile	Asn	Ile	Val	Arg	Val	Arg	Leu	Thr	Gly
		340				345						350			
Lys	Gln	Leu	Lys	Gln	Val	Ile	Gln	Lys	Ser	Gln	Lys	Gln	Glu	Tyr	Met
	355				360						365				
His	Glu	His	Ala	Gln	Gly	Leu	Gly	Phe	Arg	Gly	Asp	Ile	Phe	Gly	Gly
	370				375					380					
Tyr	Ile	Leu	Tyr	Asn	Leu	Gly	Phe	Ile	Glu	Ser	Glu	Asp	Arg	Tyr	Phe

385 390 395 400
 Ile Gly Asp Glu Glu Ile Gln Asn Asp Lys Gln Tyr Thr Leu Gly Thr
 405 410 415
 Val Asp Met Tyr Thr Phe Gly Arg Tyr Phe Pro Leu Leu Lys Gly Leu
 420 425 430
 Ser Thr Asp Tyr Ile Met Pro Glu Phe Leu Arg Asp Ile Phe Lys Glu
 435 440 445
 Lys Leu Leu Lys Leu
 450

<210> 7199

<211> 431

<212> PRT

<213> S.epidermidis

<400> 7199

Ser Lys Ile Lys Tyr Tyr Gly Arg Leu Ile Ser Pro Thr His Gln Leu
 1 5 10 15
 Glu Asp Glu Ser Val Ser Gln Val Ser Lys Gly Val Ile Lys Asp Ser
 20 25 30
 Glu Arg Trp Tyr Cys Ile Gln Cys Gly Asn Thr Ser Leu Gln Tyr Phe
 35 40 45
 Val Thr Tyr Asn Ser Thr Ile Leu Asp Lys Thr Ile Thr Tyr Cys Arg
 50 55 60
 Arg Cys Ile Gln Leu Gly Arg Met Asp Ser Ile Thr Asp Ile Cys Leu
 65 70 75 80
 Val Lys Ser Phe Gln Lys Ala Thr Lys Ala Asn Tyr Gln Leu Pro Phe
 85 90 95
 Glu Leu Ser Lys Gln Gln Gln Tyr Ala Ser Glu Thr Ile Val Gln Ala
 100 105 110
 Ile Lys Asn Asn Asn Asp Leu Leu Leu Tyr Ala Val Thr Gly Ala Gly
 115 120 125
 Lys Thr Glu Met Met Phe Glu Gly Ile Arg Ile Ala Arg Gln Met Gly
 130 135 140
 His Asn Ile Ala Ile Val Ser Pro Arg Val Asp Val Ile Ile Glu Ile
 145 150 155 160
 Ser His Arg Ile Lys Asp Ala Phe Ile Asp Glu His Ile Asp Val Leu
 165 170 175
 His Gln Ser Ser Arg Gln Gln Tyr Asn Gly His Phe Val Ile Ala Thr
 180 185 190
 Ile His Gln Leu Leu Arg Phe Lys Gln His Phe Asp Thr Val Phe Leu
 195 200 205
 Asp Glu Val Asp Ala Phe Pro Leu Ser Met Asp Pro Gln Leu Ser Asn
 210 215 220
 Ala Ile Gln Leu Ala Ser Lys Ser Asn His Ser His Ile Phe Met Thr
 225 230 235 240
 Ala Thr Pro Pro Arg His Phe Leu Lys Gln Phe Pro Pro Glu Lys Ile
 245 250 255
 Ile Lys Leu Pro Ala Arg Phe His Arg Ser Pro Leu Pro Ile Pro Lys
 260 265 270
 Phe Lys Tyr Phe Lys Leu Lys Ser Thr Arg Lys Gln Asn Leu Leu Leu
 275 280 285
 Asn Ile Phe Arg Tyr Gln Ile Asn Gln Gln Arg Phe Thr Leu Val Phe
 290 295 300
 Ile Asn Asn Ile Glu Ile Met Asn Lys Met Tyr Gln Gln Tyr Lys Met
 305 310 315 320

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

Asp Ile Pro Asp Leu Ile Cys Val His Ser Glu Asp Asp Leu Arg Phe
 325 330 335
 Glu Lys Ile Glu Ala Leu Arg Arg Gly Gln His Lys Ile Val Phe Thr
 340 345 350
 Thr Thr Ile Leu Glu Arg Gly Phe Thr Met Thr His Leu Asp Val Val
 355 360 365
 Val Val Asp Ala Gly Ser Phe Gln Gln Glu Ala Leu Ile Gln Ile Ala
 370 375 380
 Gly Arg Val Gly Arg Lys Gln Gln Ser Pro Ser Gly Leu Val Leu Phe
 385 390 395 400
 Leu His Glu Gly Val Thr Leu Ser Met Ile Leu Ala Lys Arg Asn Ile
 405 410 415
 Ile Ser Met Asn Arg Leu Ala Ile Lys Arg Gly Trp Ile Asp Ala
 420 425 430

<210> 7200

<211> 150

<212> PRT

<213> S.epidermidis

<400> 7200

Ile Lys Val Asn Leu Thr Asn Lys Gly Gly Leu Thr Met Glu Leu Tyr
 1 5 10 15
 Ser Met Pro Met Phe Asn Lys Phe Leu Val Asn Asp Ile Glu Lys Ser
 20 25 30
 Ser Glu Trp Tyr Gln Glu Asn Leu Gly Phe Lys Ser Ile Phe Lys Phe
 35 40 45
 Lys Asn Glu Gln Asn Gln Ile Leu Met Glu His Leu Arg Leu Ala Lys
 50 55 60
 Tyr Gln Asp Leu Met Leu Ile Ser Gly Lys Gln Phe Glu Val Gly Asn
 65 70 75 80
 Ala Val Tyr Thr Asn Ile Leu Val Pro Asn Ile Arg Ile Leu Lys Gln
 85 90 95
 Arg Ile Ser Ser Gln Tyr Ile Val Glu Asp Leu Glu Gly Lys Pro Trp
 100 105 110
 Asn Ser Ile Glu Met Thr Ile Lys Asp Leu Asp Asn His Leu Ile Thr
 115 120 125
 Leu Thr Gln Ser Asn Ile Lys Asn Glu Glu Phe Asn Ala Leu Met Gln
 130 135 140
 His Thr Ser Lys Thr Phe
 145 150

<210> 7201

<211> 366

<212> PRT

<213> S.epidermidis

<400> 7201

Leu Met Val Asn Lys Gly Val Gly Met Glu Met Phe Glu Ala Ile Ile
 1 5 10 15
 Tyr Asn Ile Ser Val Met Val Ala Gly Ile Tyr Leu Phe His Arg Leu
 20 25 30
 Gln Tyr Ser Glu Asn Lys Arg Met Ile Phe Ser Lys Glu Tyr Val Thr
 35 40 45
 Val Leu Met Thr Phe Val Ser Leu Leu Leu Ala Ala Tyr Pro Ile Pro
 50 55 60

```

Phe Gln Asn Glu Tyr Leu Val His Leu Thr Phe Val Pro Leu Leu Phe
65          70          75          80
Leu Gly Arg Tyr Thr Asn Met Ile Tyr Thr Leu Thr Ala Ala Phe Ile
          85          90          95
Val Ser Leu Val Asp Val Phe Ile Phe Gly Asn Ser Ile Ile Tyr Gly
          100          105          110
Ile Thr Leu Ile Val Ile Ala Gly Ile Val Ser Ala Val Gly Pro Phe
          115          120          125
Leu Lys Gln Asn Asp Ile Ile Ser Leu Leu Ile Leu Asn Leu Ile Ser
          130          135          140
Ile Ile Ile Leu Leu Phe Leu Ala Leu Leu Ser Pro Ile Tyr Glu Leu
145          150          155          160
Val Glu Ile Leu Val Leu Ile Pro Ile Ser Phe Ile Ile Thr Ile Ala
          165          170          175
Ser Ala Ile Thr Phe Val Asp Ile Trp His Phe Phe Ser Leu Val Asn
          180          185          190
Arg Tyr Glu Asn Glu Asp Lys Tyr Asp Tyr Leu Thr Gly Leu Gly Asn
          195          200          205
Val Lys Glu Phe Asp Arg His Leu Asn Glu Val Ser Ser Lys Ala Glu
          210          215          220
Glu Lys Lys Gln Ser Leu Ala Leu Leu Leu Ile Asp Ile Asp Gly Phe
225          230          235          240
Lys Asp Val Asn Asp His Tyr Ser His Gln Ser Gly Asp Ala Val Leu
          245          250          255
Lys Gln Met Ser Gln Leu Leu Lys Asn Tyr Val Pro Asn Gln Phe Lys
          260          265          270
Ile Phe Arg Asn Gly Gly Glu Glu Phe Ser Val Val Ile Arg Asp Tyr
          275          280          285
Thr Leu Asp Gln Ser Val Lys Leu Ala Glu Asn Ile Arg Ser Gly Val
          290          295          300
Glu Lys Ser Ser Phe His Leu Pro Asn Lys Glu Val Ile Lys Leu Ser
305          310          315          320
Val Ser Ile Gly Val Gly Tyr Leu Thr Gln Glu Asp Arg Lys Ser Gln
          325          330          335
Arg Lys Val Phe Lys Asp Ala Asp Asp Met Val His Val Ala Lys Ser
          340          345          350
Glu Gly Arg Asn Lys Val Met Phe Asn Pro Ile Val Lys Leu
          355          360          365

```

<210> 7202

<211> 46

<212> PRT

<213> S.epidermidis

<400> 7202

```

Ser Ser Cys Phe Arg Ile Ser Ile Ile Asn Val Ile Phe Gln Lys Arg
1          5          10          15
Thr Asn Val Cys Ile Val Leu Ile Glu Phe Val Lys Ile Glu Asn Asp
          20          25          30
Ile His Glu Lys Val Ile Asp Leu Arg Cys Val Lys Ser Leu
          35          40          45

```

<210> 7203

<211> 51

<212> PRT

<213> S.epidermidis

<400> 7203

Cys Arg Phe Leu Ile Gln Ile Asn Val Tyr Phe Glu Leu Pro Thr Lys
 1 5 10 15
 Ile Leu Ser Leu Leu Ala Val Phe Met Ser Asp Ser Ser Tyr Ser Asn
 20 25 30
 Ile Tyr Val Glu Ser Tyr Ile Leu Lys Leu Lys Ile Ala Phe Tyr Phe
 35 40 45
 Ser Ile Tyr
 50

<210> 7204

<211> 413

<212> PRT

<213> S.epidermidis

<400> 7204

Leu Gln Ser Lys Asn Arg Ile Glu Val Glu Lys Met Phe Thr Ala Leu
 1 5 10 15
 Leu Gln Ile Lys Asn Tyr Lys Leu Phe Val Val Asn Met Leu Leu Leu
 20 25 30
 Gly Met Gly Ile Ala Val Thr Val Pro Tyr Leu Ile Leu Phe Ala Thr
 35 40 45
 Lys Asp Leu Gly Met Thr Thr Thr Gln Tyr Gly Leu Leu Leu Ala Leu
 50 55 60
 Ala Ala Ile Ser Gln Phe Ile Val Asn Ser Ile Ile Ala Arg Phe Ser
 65 70 75 80
 Asp Thr His His Leu Asn Arg Lys Ile Leu Ile Ile Thr Ala Leu Phe
 85 90 95
 Met Gly Ala Val Ser Phe Ser Ile Tyr Phe Tyr Val His Gln Ile Trp
 100 105 110
 Leu Phe Ile Val Leu Tyr Ala Leu Phe Gln Gly Leu Phe Ala Pro Ala
 115 120 125
 Met Pro Gln Leu Tyr Ala Ser Ala Arg Glu Ser Ile Asn Ala Ser Ser
 130 135 140
 Ser Arg Asp Arg Ala Lys Phe Ala Asn Thr Val Leu Arg Ser Met Phe
 145 150 155 160
 Ser Leu Gly Phe Leu Phe Gly Pro Phe Ile Gly Ala Gln Leu Ile Glu
 165 170 175
 Leu Lys Gly Tyr Ser Gly Leu Phe Gly Gly Thr Ile Ala Ile Ile Leu
 180 185 190
 Phe Thr Leu Ile Leu Gln Val Phe Phe Tyr Lys Asn Leu Pro Val Lys
 195 200 205
 Asn Gln Ile Ser Glu Gln Gln His Ile Glu Lys Ile Ala Pro Asn Met
 210 215 220
 Phe Lys Asp Lys Ser Leu Phe Ile Pro Phe Ile Ala Phe Ile Leu Leu
 225 230 235 240
 His Ile Gly Gln Trp Met Tyr Thr Met Asn Met Pro Leu Phe Val Thr
 245 250 255
 Asp Tyr Leu Asn Glu Lys Glu Arg Tyr Val Gly Tyr Leu Ala Ser Leu
 260 265 270
 Cys Ala Gly Leu Glu Val Pro Phe Met Val Ile Leu Gly Ile Leu Ser
 275 280 285
 Ala Lys Leu Pro Thr Arg Thr Leu Leu Ile Ile Gly Ser Val Phe Gly
 290 295 300
 Gly Ala Phe Tyr Phe Ser Ile Gly Val Phe Lys Asn Phe His Met Met

305 310 315 320
 Leu Val Gly Gln Ile Cys Leu Ala Ile Phe Leu Ala Ile Leu Leu Gly
 325 330 335
 Leu Gly Ile Ser Tyr Phe Gln Asp Ile Leu Pro Asp Phe Pro Gly Tyr
 340 345 350
 Ala Ser Thr Leu Phe Ala Asn Ala Met Val Ile Gly Gln Leu Gly Gly
 355 360 365
 Asn Leu Leu Gly Gly Val Met Ser His Trp Val Gly Leu Glu Asn Val
 370 375 380
 Phe Phe Val Ser Ala Ser Ser Ile Phe Val Gly Met Ile Leu Ile Leu
 385 390 395 400
 Phe Thr Lys Asp Gln Lys Ile Thr Ile Glu Asp Val Glu
 405 410

<210> 7205

<211> 397

<212> PRT

<213> S.epidermidis

<400> 7205

Ile Met Ala Lys Lys Ile Val Ser Asp Leu Asp Leu Lys Gly Lys Val
 1 5 10 15
 Val Leu Glu Arg Ala Asp Phe Asn Val Pro Ile Lys Asp Gly Glu Ile
 20 25 30
 Thr Asn Asp Asn Arg Ile Val Gln Ala Leu Pro Thr Ile Glu Tyr Ile
 35 40 45
 Ile Glu Gln Gly Gly Lys Leu Val Leu Phe Ser His Leu Gly Lys Val
 50 55 60
 Lys Glu Glu Ser Asp Lys Glu Gly Leu Ser Leu Lys Pro Val Ala Glu
 65 70 75 80
 Asn Leu Ser Lys Lys Leu Gly Lys Glu Val Ile Phe Val Pro Glu Thr
 85 90 95
 Arg Gly Glu Lys Leu Glu Thr Ala Ile Glu Asn Leu Asn Glu Gly Asp
 100 105 110
 Val Leu Leu Val Glu Asn Thr Arg Phe Glu Asp Leu Asp Gly Lys Lys
 115 120 125
 Glu Ser Lys Asn Asp Pro Glu Leu Gly Lys Tyr Trp Ala Ser Leu Gly
 130 135 140
 Asp Val Phe Val Asn Asp Ala Phe Gly Thr Ala His Arg Glu His Ala
 145 150 155 160
 Ser Asn Val Gly Ile Ser Thr His Leu Glu Thr Ala Ala Gly Tyr Leu
 165 170 175
 Met Glu Lys Glu Ile Lys Phe Ile Gly Gly Val Val Asn Asp Pro Gln
 180 185 190
 Lys Pro Val Val Ala Ile Leu Gly Gly Ala Lys Val Ser Asp Lys Ile
 195 200 205
 Asn Val Ile Lys Asn Leu Val Asn Ile Ala Asp Lys Ile Leu Ile Gly
 210 215 220
 Gly Gly Met Ala Tyr Thr Phe Ile Lys Ala Gln Gly Lys Glu Ile Gly
 225 230 235 240
 Leu Ser Leu Leu Glu Glu Asp Lys Ile Asp Phe Ala Lys Asp Leu Leu
 245 250 255
 Glu Asn Asn Gly Asp Gln Ile Val Leu Pro Val Asp Cys Lys Ile Ala
 260 265 270
 Lys Glu Phe Ser Asn Asp Ala Lys Ile Thr Glu Val Ser Ile Asn Glu
 275 280 285

Ile Pro Ser Asp Gln Glu Ala Met Asp Ile Gly Pro Lys Thr Val Glu
 290 295 300
 Leu Phe Asn Lys Glu Leu Gln Gly Ala His Thr Val Val Trp Asn Gly
 305 310 315 320
 Pro Met Gly Val Phe Glu Phe Ser Asn Phe Ala Lys Gly Thr Ile Gly
 325 330 335
 Val Cys Glu Ser Ile Ala Lys Leu Glu Asp Ala Thr Thr Ile Ile Gly
 340 345 350
 Gly Gly Asp Ser Ala Ala Ala Ala Ile Ser Leu Gly Phe Glu Asp Asp
 355 360 365
 Phe Thr His Ile Ser Thr Gly Gly Gly Ala Ser Leu Glu Tyr Leu Glu
 370 375 380
 Gly Lys Glu Leu Pro Gly Ile Lys Ala Ile Asn Asp Lys
 385 390 395

<210> 7206

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7206

Leu Leu Tyr Asn Ile Thr Ala Asn Tyr Ser Tyr Asn Asn Thr Val Leu
 1 5 10 15
 Asp His Ser Pro Leu Gln His Arg Ala Phe Leu Ser Ile Lys Lys Thr
 20 25 30
 Pro His Leu Ser Asp Val Ile Asn
 35 40

<210> 7207

<211> 175

<212> PRT

<213> S.epidermidis

<400> 7207

Glu Glu His Lys Glu Thr Cys Arg Met Lys His Gln Lys Asn Gln Ser
 1 5 10 15
 Arg Phe Lys Leu Leu Ile Ala Gly Ile Ile Ala Gly Leu Leu Ser Gly
 20 25 30
 Val Val Lys Leu Gly Trp Glu Val Met Phe Pro Pro Arg Thr Pro Ser
 35 40 45
 Arg Asp Ala Thr Asn Pro Pro Gln Gln Leu Leu Gln Leu Leu Gly Ile
 50 55 60
 Pro Ser Asn Ile Thr His Leu Thr Tyr Asn Phe Ser Glu His Ala Leu
 65 70 75 80
 Pro Trp Ile Ser Phe Ile Val His Tyr Ser Phe Ser Ile Ala Ile Ala
 85 90 95
 Ile Ile Tyr Ile Tyr Ile Ala Lys Lys Tyr Thr Lys Ile Thr Leu Gly
 100 105 110
 Tyr Gly Ala Leu Phe Gly Ile Val Ile Trp Ile Val Phe His Leu Ile
 115 120 125
 Leu Met Pro Ile Met His Val Val Pro Asn Ala Phe Asp Gln Pro Phe
 130 135 140
 Ser Glu His Leu Ser Glu Phe Phe Gly His Ile Val Trp Met Met Val
 145 150 155 160
 Ile Glu Met Val Arg Arg Tyr Phe Tyr Asn Ile Gln Leu Asn Lys
 165 170 175

Trp Asn Gly Leu Thr Asp Lys
50 55

<210> 7210

<211> 43

<212> PRT

<213> S.epidermidis

<400> 7210

Cys Thr Asn Asn Pro Cys Asn Leu Phe Thr Leu Leu Lys Phe Ile His
1 5 10 15
Val Ser His Ile Pro Ser Ile Glu Cys Asp Asn Val Asn Phe Phe Asn
20 25 30
Leu Ile Lys Leu Thr Ile Leu Leu Tyr Pro Leu
35 40

<210> 7211

<211> 75

<212> PRT

<213> S.epidermidis

<400> 7211

Val Ser Asn Lys His Asn His Leu Leu Phe Asn Asn Phe Val Val Tyr
1 5 10 15
Ile Ile Asp Leu Leu Phe Ser Ser Phe Leu Leu Tyr Gly Leu Ser Phe
20 25 30
Pro Ile Ile Gln Lys Leu Gln Ile Pro Ile Arg Glu Gly Ala Phe Met
35 40 45
Asn His Asn Phe Ile Cys Thr Arg Thr Thr Asn Phe Pro Phe Lys Lys
50 55 60
Glu Val Ala Leu Tyr Asn Ile Leu His Asp Val
65 70 75

<210> 7212

<211> 347

<212> PRT

<213> S.epidermidis

<400> 7212

Leu Met Asn Asn Phe Arg Trp Phe Trp Phe Phe Ile Lys Ser Arg Ile
1 5 10 15
Asn Trp Ile Leu Trp Ile Leu Phe Leu Asn Ile Ile Leu Leu Gly Val
20 25 30
Ala Tyr Ile Asp Tyr Glu Ile Ser Val Glu Ser Val Phe Tyr Ile Val
35 40 45
Ile Leu Asn Val Gly Leu Ser Ile Leu Phe Leu Leu Phe Thr Phe Val
50 55 60
Lys Glu Val Arg Leu Ser Lys His Phe Tyr Glu Asp Lys Glu Ile Glu
65 70 75 80
Glu Ile Lys His Lys Asp Leu Ala Glu Thr Pro Phe Gln Gln Gln Val
85 90 95
Ile Asp Tyr Leu Tyr Arg His Ile Ala Ala Gln Lys Glu Lys Val Val
100 105 110
Glu Gln Gln Leu Gln Ile Lys Asn His Glu Gln Thr Ile Thr Glu Phe
115 120 125
Val His Asp Ile Lys Thr Pro Val Thr Ala Met Lys Leu Leu Ile Asp

130 135 140
 Gln Glu Asn Asp Asp Gln Arg Lys Arg Ala Leu Leu Phe Glu Trp Ser
 145 150 155 160
 Arg Ile Asn Glu Met Leu Asp Lys Gln Leu Tyr Leu Thr Arg Leu Glu
 165 170 175
 Thr His His Arg Asp Met Tyr Phe Asp Tyr Ile Ser Leu Lys Arg Met
 180 185 190
 Val Ile Asp Glu Ile Gln Val Thr Arg His Ile Ser Gln Ala Lys Gly
 195 200 205
 Ile Gly Phe Glu Leu Asp Phe Lys Asp Glu Gln Lys Val Tyr Thr Asp
 210 215 220
 Val Lys Trp Cys Arg Met Met Ile Arg Gln Val Leu Ser Asn Ser Leu
 225 230 235 240
 Lys Tyr Ser Asp Asn Ser Thr Ile Asn Leu Ser Gly Tyr Asn Ile Glu
 245 250 255
 Gly His Val Val Leu Lys Ile Lys Asp Tyr Gly Arg Gly Ile Ser Lys
 260 265 270
 Arg Asp Leu Pro Arg Ile Phe Asp Arg Gly Phe Thr Ser Thr Thr Asp
 275 280 285
 Arg Asn Asp Thr Ala Ser Ser Gly Met Gly Leu Tyr Leu Val Gln Ser
 290 295 300
 Val Lys Glu Gln Leu Gly Ile Glu Val Lys Val Asp Ser Ile Val Gly
 305 310 315 320
 Lys Gly Thr Thr Phe Tyr Phe Ile Phe Pro Gln Gln Asn Glu Ile Ile
 325 330 335
 Glu Arg Met Ser Lys Val Thr Arg Leu Ser Phe
 340 345

<210> 7213

<211> 318

<212> PRT

<213> S.epidermidis

<400> 7213

Asn Ile Cys Asn Ser Lys Gly Tyr Ile Lys Met Lys Asn Asn Lys Asn
 1 5 10 15
 Glu Lys Leu Lys Ile Thr Ile Val Ser Gly Phe Leu Gly Ser Gly Lys
 20 25 30
 Thr Thr Phe Leu Thr His Tyr Ile Asn Glu Leu Leu Lys Ile Asp Glu
 35 40 45
 Lys Ile Thr Val Ile Met Asn Glu Phe Gly Ser Phe Asp Val Asp Gly
 50 55 60
 Asn His Leu Ser Glu Leu Val Lys Val Tyr Pro Leu Leu Asn Gly Cys
 65 70 75 80
 Val Cys Cys Asp Met Lys Ser Asp Leu Val Gln Gln Ile Glu Met Leu
 85 90 95
 Ser His Asn His Glu Thr Asp His Ile Ile Glu Ala Thr Gly Ile
 100 105 110
 Ala His Pro Ile Glu Leu Ile Met Ala Cys Gln Asp Pro Arg Ile Val
 115 120 125
 Gln Phe Val Glu Arg Pro His Val Val Ser Ile Val Asp Ala Leu Arg
 130 135 140
 Phe Leu Gln Arg Gln Gln Tyr Thr Asp Ser Thr Lys Arg Leu Met Glu
 145 150 155 160
 Glu Gln Leu Glu Val Ser Asp Val Leu Val Val Asn Lys Leu Asp Leu
 165 170 175

Ile Ser Val Glu Asp Arg Asp Ala Leu Lys Asn Gln Leu Asn Glu Val
 180 185 190
 Asn Lys Tyr Ser Ser Lys Ile Tyr Thr Thr Tyr Gly Gln Val Asn Ile
 195 200 205
 Glu Glu Leu Ser Gln Phe Arg Asp Gln Leu Val Met Thr His Thr His
 210 215 220
 Ser His His His Gly Ile Asn Ser Met Gln Tyr Thr Phe Thr Thr Ala
 225 230 235 240
 Ile Asp Arg Gln Leu Phe Tyr Gln Phe Ile Leu Arg Met Pro Asp Asn
 245 250 255
 Val Leu Arg Leu Lys Gly Tyr Val Gln Phe Lys Asp Glu Pro Asn Val
 260 265 270
 Thr Tyr Glu Phe Gln Tyr Ser Phe Gly Met Pro Asp Tyr Glu Val Ile
 275 280 285
 Asn Gly Asp Tyr Pro Leu Thr Ile Val Leu Ile Gly Glu Gln Leu Asp
 290 295 300
 Val Asn Arg Leu Lys Asn Lys Leu Asp Val Leu Gln Phe Ser
 305 310 315

<210> 7214

<211> 98

<212> PRT

<213> S.epidermidis

<400> 7214

Lys Ser Cys Lys Glu Val Ile Glu Met Asn Leu Glu Lys Ile Tyr Glu
 1 5 10 15
 Glu Ile Ser Asn Glu Ile Lys Ala Met Thr Asp Asp Glu Ile Lys Glu
 20 25 30
 Val Ser Asp Ile Leu Tyr Glu Ser Lys Leu Leu Asn Val Asp Tyr Ser
 35 40 45
 Asn Leu Lys Ser Phe Lys Ala Asp Thr Lys His Ser Tyr Lys Val Lys
 50 55 60
 Glu Asn Glu Tyr Asn Val Ile Glu Lys Asn Ile Asn Glu Lys Pro Asn
 65 70 75 80
 Leu Glu Asn His Glu Val Asn Gln Val Lys Asn Asn Asn Ile Ile Ile
 85 90 95
 Ala Ala

<210> 7215

<211> 212

<212> PRT

<213> S.epidermidis

<400> 7215

Phe Ser Ser Lys Lys Lys Lys Thr Val Pro Ile Lys Ile Asn Asn Pro
 1 5 10 15
 Val Val Val Asn Thr Ser Leu Glu Cys Lys Asp Asn Phe Leu Lys Leu
 20 25 30
 Leu Ala Phe His Lys Ser Thr Thr Thr Lys Cys Pro Lys Pro Pro Lys
 35 40 45
 Met Ile Ser Ile Gly Ile Val Ile Met Ile Thr Gly Ser Phe Glu Lys
 50 55 60
 Ser Ile Lys Leu Phe Leu Lys Arg Ala Asn Pro Ala Leu Leu Asn Ala
 65 70 75 80

<210> 7217
 <211> 353
 <212> PRT
 <213> S.epidermidis

<400> 7217

```

Leu Pro Leu Lys Tyr Leu Cys Tyr Lys Asp Ile Arg Arg Lys Val Val
1      5      10      15
Val Lys Asp Leu Ile Lys Val Gln Gln Lys Leu Ile Pro Asp Leu Ile
20      25      30
Asp Lys Met Tyr Arg Arg Phe Tyr Ile Leu Ser Thr Ile Ser Gln Asn
35      40      45
Gln Pro Val Gly Arg Arg Ser Leu Ser Glu His Met Asp Met Thr Glu
50      55      60
Arg Val Leu Arg Ser Glu Thr Asp Met Leu Lys Lys Gln Glu Leu Ile
65      70      75      80
Arg Val Lys Pro Thr Gly Met Glu Ile Thr Asn Glu Gly Thr Glu Val
85      90      95
Leu Ala Gln Leu Gly Glu Tyr Phe Asn Val Tyr Ser Asp Asp His Lys
100     105     110
Leu Ala Ser Ala Ile Lys Asp Lys Phe His Ile Lys Asp Val His Val
115     120     125
Ile Pro Gly Asp Ser Asp Ser Asn Arg Thr Val Lys Arg Glu Met Gly
130     135     140
Gln Gln Ala Gly Gln Leu Leu Glu Gly Ile Leu Tyr Glu Asp Ala Ile
145     150     155     160
Val Ser Val Thr Gly Gly Ser Thr Met Ala Cys Val Ser Glu Ser Ile
165     170     175
His Leu Leu Pro Phe Asn Val Phe Phe Val Pro Ala Arg Gly Gly Leu
180     185     190
Gly Glu Asn Val Val Tyr Gln Ala Asn Thr Ile Ala Ser Ser Met Ala
195     200     205
Gln Gln Ala Gly Gly Tyr Tyr Thr Thr Leu Tyr Val Pro Asp Asn Val
210     215     220
Ser Glu Ser Thr Tyr Asp Thr Leu Met Leu Glu Pro Ser Val Met His
225     230     235     240
Thr Leu Asp Lys Ile Lys Gln Ala Asn Ile Thr Ile His Gly Ile Gly
245     250     255
Asp Ala Leu Lys Met Ala His Arg Arg Gln Ser Ser Gln Asn Val Ile
260     265     270
Asp Asn Leu Gln His His Gln Ala Val Gly Glu Ala Phe Gly Tyr Tyr
275     280     285
Phe Asp Ala Gln Gly Gln Ile Val His Lys Val Lys Thr Ile Gly Leu
290     295     300
Gln Leu Glu Asp Leu Glu Asn Lys Asp Phe Ile Phe Ala Val Ala Gly
305     310     315     320
Gly Gln Ser Lys Gly Glu Ala Ile Lys Ala Tyr Leu Ser Ile Ala Pro
325     330     335
Glu Asn Thr Val Leu Ile Thr Asp Glu Ala Ala Ala Lys Val Ile Leu
340     345     350
Gln

```

<210> 7218
 <211> 50
 <212> PRT

<213> S.epidermidis

<400> 7218

Phe Val Tyr Lys Val Phe Ser Phe Leu Asn Cys Phe Ile His Phe Pro
 1 5 10 15
 Val Ser Gly Tyr Asn Trp Cys Ser His Ser Leu His Ser Leu Ile Phe
 20 25 30
 Ser Val Lys Phe Val Ser Phe Tyr Pro Asn Thr Cys Leu Phe Arg Asn
 35 40 45
 Lys Arg
 50

<210> 7219

<211> 45

<212> PRT

<213> S.epidermidis

<400> 7219

Gln Asn Tyr Asn Arg Thr Asn Lys Phe Gly Asp Thr Ala His Ile Val
 1 5 10 15
 Tyr Leu Ser Phe Ile Leu Lys His Glu Phe Ile Leu Lys Thr Ile Leu
 20 25 30
 Leu Asn His Cys Lys Lys Ser Asn Leu Asn Tyr Phe Gln
 35 40 45

<210> 7220

<211> 253

<212> PRT

<213> S.epidermidis

<400> 7220

Ser Gln Val Leu Thr Tyr Leu Leu Lys Cys Leu Asn Met Leu Lys Asn
 1 5 10 15
 Leu Val Ala Glu Tyr Gln Tyr Gly Asp Ile Lys Ser Val Glu Asp Lys
 20 25 30
 Gly Asp Tyr Lys Val Ile Asn Leu Gly Asn Lys Glu Ile Thr Ala His
 35 40 45
 Ala Val Ile Ile Ser Thr Gly Ala Glu Tyr Lys Lys Ile Gly Val Pro
 50 55 60
 Gly Glu Gln Glu Leu Gly Gly Arg Gly Val Ser Tyr Cys Ala Val Cys
 65 70 75 80
 Asp Gly Ala Phe Phe Lys Asn Lys Arg Leu Phe Val Ile Gly Gly Gly
 85 90 95
 Asp Ser Ala Val Glu Glu Gly Thr Phe Leu Thr Lys Phe Ala Asp Lys
 100 105 110
 Val Thr Ile Val His Arg Arg Asp Glu Leu Arg Ala Gln Asn Ile Leu
 115 120 125
 Gln Glu Arg Ala Phe Lys Asn Asp Lys Val Asp Phe Ile Trp Ser His
 130 135 140
 Thr Leu Lys Thr Ile Asn Glu Lys Asp Gly Lys Val Gly Ser Val Thr
 145 150 155 160
 Leu Glu Ser Thr Lys Asp Gly Ala Glu Gln Thr Tyr Asp Ala Asp Gly
 165 170 175
 Val Phe Ile Tyr Ile Gly Met Lys Pro Leu Thr Ala Pro Phe Lys Asn
 180 185 190
 Leu Gly Ile Thr Asn Asp Ala Gly Tyr Ile Val Thr Gln Asp Asp Met

195	200	205
Ser Thr Lys Val Arg Gly Ile Phe Ala Ala Gly Asp Val Arg Asp Lys		
210	215	220
Gly Leu Arg Gln Ile Val Thr Ala Thr Gly Asp Gly Ser Ile Ala Ala		
225	230	235
Gln Ser Ala Ala Asp Tyr Ile Thr Glu Leu Lys Asp Asn		240
245	250	

<210> 7221
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 7221
Thr Ser Asn Asn Thr Ile Tyr Ile Leu Tyr Phe Asn Phe Thr Ile His
1 5 10 15
Tyr Ile Tyr Val Ser Asn Ile Ile Gln Phe Lys Phe Tyr Val Leu Leu
20 25 30
Arg Ile Val Phe Lys Ile Leu His Ile Gln Ile Ile Cys Gln Gln Leu
35 40 45
Asn

<210> 7222
 <211> 149
 <212> PRT
 <213> S.epidermidis

<400> 7222
Arg Gly Asp Lys Arg Met Tyr Phe Val Asp Lys Asp Lys Leu Thr Gln
1 5 10 15
Lys Ile Thr Tyr Leu Gln Lys Leu Thr Glu Asp Tyr Asn Asp Asn Lys
20 25 30
Arg Asn Leu Tyr Ala Phe Glu Arg Ile Gly Gln Met Leu Ile Glu Ser
35 40 45
Ser Val Asp Ile Gly Asn Met Ile Ile Asp Gly Phe Ile Leu Arg Asp
50 55 60
Pro Gly Asn Tyr Lys Asp Val Ile Asp Ile Leu Glu Leu Glu Asn Val
65 70 75 80
Ile Ser Lys Glu Thr Gln Ser His Ile Asn Arg Thr Ile Asp Val Arg
85 90 95
Lys Gln Phe Ala His His Tyr Ile Asp Leu Asn Met Asn Lys Ile Glu
100 105 110
Pro Leu Phe Asp Asp Ala Leu Pro Tyr Tyr Lys Gln Phe Ile Gln Glu
115 120 125
Val Gly Gln Phe Leu Glu Asn Glu Asn Val Pro Ile Thr Ala Phe Gly
130 135 140
Lys Gly Ala Asn Asn
145

<210> 7223
 <211> 348
 <212> PRT
 <213> S.epidermidis

<400> 7223

Tyr Phe Leu Asn Ile Ile Leu Lys Glu Ala Ile Ile Met Ala Ile Lys
 1 5 10 15
 Val Ala Ile Asn Gly Phe Gly Arg Ile Gly Arg Leu Ala Phe Arg Arg
 20 25 30
 Ile Gln Asp Val Glu Gly Leu Glu Val Val Ala Val Asn Asp Leu Thr
 35 40 45
 Asp Asp Asp Met Leu Ala His Leu Leu Lys Tyr Asp Thr Met Gln Gly
 50 55 60
 Arg Phe Thr Gly Glu Val Glu Val Ile Glu Gly Gly Phe Arg Val Asn
 65 70 75 80
 Gly Lys Glu Ile Lys Ser Phe Asp Glu Pro Asp Ala Gly Lys Leu Pro
 85 90 95
 Trp Gly Asp Leu Asp Ile Asp Val Val Leu Glu Cys Thr Gly Phe Tyr
 100 105 110
 Thr Asp Lys Glu Lys Ala Gln Ala His Ile Asp Ala Gly Ala Lys Lys
 115 120 125
 Val Leu Ile Ser Ala Pro Ala Lys Gly Asp Val Lys Thr Ile Val Phe
 130 135 140
 Asn Thr Asn His Asp Thr Leu Asp Gly Ser Glu Thr Val Val Ser Gly
 145 150 155 160
 Ala Ser Cys Thr Thr Asn Ser Leu Ala Pro Val Ala Lys Val Leu Ser
 165 170 175
 Asp Glu Phe Gly Leu Val Glu Gly Phe Met Thr Thr Ile His Ala Tyr
 180 185 190
 Thr Gly Asp Gln Asn Thr Gln Asp Ala Pro His Arg Lys Gly Asp Lys
 195 200 205
 Arg Arg Ala Arg Ala Ala Ala Glu Asn Ile Ile Pro Asn Ser Thr Gly
 210 215 220
 Ala Ala Lys Ala Ile Gly Lys Val Ile Pro Glu Ile Asp Gly Lys Leu
 225 230 235 240
 Asp Gly Gly Ala Gln Arg Val Pro Val Ala Thr Gly Ser Leu Thr Glu
 245 250 255
 Leu Thr Val Val Leu Asp Lys Gln Asp Val Thr Val Asp Gln Val Asn
 260 265 270
 Ser Ala Met Lys Gln Ala Ser Asp Glu Ser Phe Gly Tyr Thr Glu Asp
 275 280 285
 Glu Ile Val Ser Ser Asp Ile Val Gly Met Thr Tyr Gly Ser Leu Phe
 290 295 300
 Asp Ala Thr Gln Thr Arg Val Met Thr Val Gly Asp Arg Gln Leu Val
 305 310 315 320
 Lys Val Ala Ala Trp Tyr Asp Asn Glu Met Ser Tyr Thr Ala Gln Leu
 325 330 335
 Val Arg Thr Leu Ala His Leu Ala Glu Leu Ser Lys
 340 345

<210> 7224

<211> 85

<212> PRT

<213> S.epidermidis

<400> 7224

Leu Trp Leu Lys Ser Thr Ser Lys Val Met Asn Met Lys Asp Trp Thr
 1 5 10 15
 Ile Asn Asn His Ser Lys Arg Gln Leu Ile Ile Gln Ser Asn His Asp
 20 25 30
 Asp Ile Ser Ile Ile Glu Pro Leu Arg Asn Gly Ser Phe Lys Ile Leu

```
<210> 7225
<211> 42
<212> PRT
<213> S.epidermidis
```

```
<210> 7226
<211> 351
<212> PRT
<213> S.epidermidis
```

<400> 7226															
Tyr 1	Glu	Leu	Asn 5	Leu	Lys	Glu	Lys	Cys	Ile 10	Met	Ile	Ile	Ala	Ile 15	Ile
Leu	Leu	Ile	Phe 20	Val	Ser	Phe	Phe	Phe	Ser	Gly	Ser	Glu	Thr 30	Ala	Leu
Thr	Ala	Ala	Asn 35	Arg	Thr	Lys	Phe	Gln	Thr	Glu	Ala	Lys 45	Lys	Gly	Asp
Arg	Lys 50	Ala	Gln	Gly	Leu	Thr 55	Lys	Leu	Leu	Asp	Lys 60	Pro	Ser	Glu	Phe
Ile 65	Thr	Thr	Ile	Leu 70	Ile	Gly	Asn	Asn	Val	Ala	Asn 75	Ile	Ile	Leu 80	Pro
Thr	Leu	Val	Thr 85	Ile	Leu	Ala	Ile	Asp	Ile	Gly	Val	Asn 95	Val	Gly	Ile
Ala	Ser	Ala	Ile 100	Val	Thr	Ile	Val	Ile 105	Ile	Leu	Ile	Ser	Glu 110	Val	Ile
Pro	Lys	Ser 115	Ile	Ala	Ala	Thr	Phe 120	Pro	Asp	Lys	Ile	Ser 125	Lys	Leu	Val
Tyr	Pro 130	Ile	Ile	His	Ile	Cys 135	Val	Ile	Val	Leu	Lys 140	Pro	Ile	Thr	Ile
Leu 145	Leu	Asn	Lys	Met 150	Thr	Asp	Gly	Ile	Asn	His 155	Leu	Leu	Ser	Arg	Gly
Gln	Pro	Val	Glu 165	Lys	Arg	Phe	Ser	Lys	Glu	Glu	Ile	Arg	Thr 175	Leu	Leu
Asn	Ile	Ala	Gly 180	Arg	Glu	Gly	Ala	Phe 185	Asn	Glu	Ile	Glu	Asn 190	Thr	Arg
Leu	Gln 195	Asn	Val	Met	Asp	Phe	Glu	Gln 200	Leu	Lys	Val	Lys 205	Asp	Val	Asp
Thr	Thr 210	Pro	Arg	Ile	Asn	Val 215	Val	Ala	Phe	Ser	Lys 220	Glu	Val	Thr	Tyr
Asp	Glu	Ala	Tyr	Asp	Thr	Val	Met	Asn	Asn	Pro	Tyr	Thr	Arg	Tyr	Pro

225 230 235 240
 Val Tyr Asp Glu Asn Ile Asp Asp Ile Ile Gly Val Phe His Ser Lys
 245 250 255
 Tyr Leu Leu Ala Trp Ser Lys His Lys Glu Glu Ser Ile Thr Asn Tyr
 260 265 270
 Ala Ser Ser Pro Leu Phe Val Asn Glu His Asn Arg Ala Glu Trp Val
 275 280 285
 Leu Arg Lys Met Thr Val Ser Arg Lys His Leu Ala Ile Val Leu Asp
 290 295 300
 Glu Phe Gly Gly Thr Asp Ala Ile Val Ser His Glu Asp Leu Ile Glu
 305 310 315 320
 Glu Leu Leu Gly Met Asp Ile Glu Asp Glu Met Asp Arg Glu Glu Glu
 325 330 335
 Asn Lys Leu Lys His Gln Lys Phe Pro Gln Ser Met Met His Arg
 340 345 350

<210> 7227
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 7227
 Phe Asn Ile Lys Ser Ser Lys Ile Leu Cys Val Lys Val Ile Leu Lys
 1 5 10 15
 Leu Phe Lys Leu Ile Tyr His Phe Ile Thr Ser His Thr Pro Tyr Tyr
 20 25 30
 Ser Thr Leu Ser Leu Ser Asn Thr Gly Phe Lys Tyr
 35 40

<210> 7228
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 7228
 Val Phe Ile Asn Ser Cys Ala Lys Leu Thr Val Asn Lys Pro Arg Asn
 1 5 10 15
 Val Thr Gly Pro Ile Asn Ala Val Asp Ile Glu Thr Ser Lys Ala Thr
 20 25 30
 Lys Ile Arg Asn Ile Arg Val Ile Phe Ser
 35 40

<210> 7229
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 7229
 Asn Leu Ile Asn Ile Gly Trp Gly Ile Val Leu Ile Cys Ser Leu Gln
 1 5 10 15
 Ser Arg Tyr Asp Ile Asn Gln Ala Leu Glu Phe Val Phe Leu Ile Ser
 20 25 30
 Val Ser Ala Tyr Phe Val Cys Leu Asn Phe Glu Leu Thr Asn
 35 40 45

<210> 7230

<211> 168
 <212> PRT
 <213> S.epidermidis

<400> 7230

```

Asp Arg Ile Asn Leu Lys Arg Asn Val Gly Lys Glu Met Lys Leu Lys
1           5           10           15
Asn Leu Phe Leu Ser Ser Val Ala Val Ile Leu Ser Ile Cys Leu Val
20           25           30
Leu Leu Leu Phe Leu Ala Thr Asn Gln Asn Ala Leu Ala Lys Val His
35           40           45
Lys Thr Ile Cys Thr Phe Thr Lys Val Lys Thr Val Ser His Asn Asp
50           55           60
Ile Phe Pro Asn Leu Asn Met Asn His Val Ala Glu Ala Ser Glu Lys
65           70           75           80
Asn Ser Asp His Gln Lys Asn Val Asn Lys Thr Asn Gln Gln Ser Val
85           90           95
Arg Thr Gln Ala Ser Tyr Asp Phe Asn Pro Gln Glu Cys Lys Val Ile
100          105          110
Ala Leu Asn Tyr Ala Glu Asn His Leu Ser Lys Lys Tyr Asn Ile Glu
115          120          125
Arg Thr Phe Asn Glu Ser Leu His Ser Val Tyr Val Phe Ser Ser Glu
130          135          140
Asn Lys Leu His Gln Thr Lys Val Lys Val Asn Lys Ser Gly Thr Val
145          150          155          160
His Ala Ser Asn Ile Asn Asn His
165

```

<210> 7231
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 7231

```

Asn Val Ile Asn Ser Phe Gln Ser His His Phe Pro Ile Asp Lys Asn
1           5           10           15
Ile Lys Leu Ile Leu Lys Thr Ile Phe Lys Tyr Val Val Asn Asn Val
20           25           30
Phe Tyr Ser Asn Lys Thr Ile Ile Ala Tyr Phe
35           40

```

<210> 7232
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7232

```

Asp Tyr Val Asn Thr Gln Tyr Leu Thr Arg Met Tyr Asp Lys Glu Ile
1           5           10           15
Asp Lys Met Ile Ala Asn Ser Ser Glu Lys Arg Met Ser Phe Asn Glu
20           25           30
Asn Gln Ser His Arg Pro Leu Leu
35           40

```

<210> 7233
 <211> 86

<212> PRT

<213> S.epidermidis

<400> 7233

```

Phe Ile Val Lys Gly Cys Asp Val Val Met Asn Lys Asn Leu Leu Lys
1           5           10           15
Lys Tyr Leu Asn Asp Asp Ser Phe Lys Ser Val Val Val Ile Gly
          20           25           30
Asn Lys Arg Ile Val Leu Glu Asn Asp Ile His Val Asp Tyr Glu Asn
          35           40           45
Glu Val Ile Ile Tyr Pro Cys Lys Asn Cys Thr Arg Ile Ile Pro Phe
          50           55           60
Ser Ser Ile Ser Tyr Leu Glu Leu Ile Asp Lys Gln Asp Gln Phe Ile
65           70           75           80
Asn Tyr Phe Lys Glu Gly
          85

```

<210> 7234

<211> 74

<212> PRT

<213> S.epidermidis

<400> 7234

```

Phe Leu Ser Lys Leu Leu Gly Lys Leu Ala Tyr His His Arg Leu Leu
1           5           10           15
Thr Thr Val Leu Pro Leu Ile Ser Thr Asn Asn His Ser Cys His Thr
          20           25           30
Ser Thr Lys Leu Ser Phe Tyr Glu Asp Lys Leu Asn Val Asp Tyr His
          35           40           45
Ile Phe Phe Asn Leu His Leu Leu Tyr Arg Leu Phe Ile Thr Ile
          50           55           60
Val Ile Ile Val Ser Asn Lys Thr His Val
65           70

```

<210> 7235

<211> 147

<212> PRT

<213> S.epidermidis

<400> 7235

```

Val Thr Thr Lys Glu Ser Ile Met Arg Lys Trp Leu Thr Leu Leu Leu
1           5           10           15
Ile Thr Thr Leu Val Leu Thr Ala Cys Gly Lys Ser Asn Glu Lys Ala
          20           25           30
Ser Leu Glu Lys Ser Ile Asp Gln Leu Lys Lys Glu Asn Lys Asp Leu
          35           40           45
Lys Lys Gln Lys Lys Lys Leu Gln Glu Gln Lys Asp Lys Leu Lys His
          50           55           60
Lys Gln Asp Ser Leu Gln Glu Asp Val Asn Asp Leu Pro Ala Lys Ser
65           70           75           80
Thr Ser Arg Asp Lys Lys Asn Lys Asp Asn His Asp Ala Lys Glu Lys
          85           90           95
Ser Ser Asp Asn Gln Ser Thr Ser Ala Asn His Asp Asp Gln Thr Asn
          100          105          110
Lys Ile Lys Ser Asn Gln Asp Glu His Asp Ser Gln Ser Ser Lys Pro
          115          120          125

```

His Thr Gln Gln Lys Pro Ser Gln Asn Asp Arg Lys Asn Asn His Arg
 130 135 140
 Gln Glu Arg
 145

<210> 7236
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 7236
 Leu Gln Thr Asn Val Glu Cys Asn Leu Ile Ile Met Lys Phe Lys Lys
 1 5 10 15
 Ile Asn Lys Ile Lys Ile Val Ile Pro Thr Asp Ser Gln Asp Ile Glu
 20 25 30
 Tyr Phe Val Ile Met Phe Lys Leu Ile Lys Ile Arg Arg
 35 40 45

<210> 7237
 <211> 55
 <212> PRT
 <213> S.epidermidis

<400> 7237
 Thr Asn Ala Lys Tyr Phe Tyr Ser Leu Ser Trp Leu Thr Leu Met Lys
 1 5 10 15
 Phe Ile Asn Asn Leu Thr Ile Pro Phe Ile Lys Asn Gln Thr Ile Ser
 20 25 30
 His Asn Asn Ser Leu His Leu Leu Lys Gln Arg Val Lys Ser Ser Lys
 35 40 45
 Asn Ser Thr Leu Asn Thr Leu
 50 55

<210> 7238
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 7238
 Leu Ile Ala Lys Ile Ser Ile Met Leu Leu Ile Lys Thr Asp Asn Asn
 1 5 10 15
 Met Glu Leu Asn Leu Ser Cys Leu Lys Arg Cys Arg Tyr Lys Ser Lys
 20 25 30
 Pro Arg Ile Ser Lys Thr Met Ala Met Leu Ile Asn Ile Tyr Ile Ile
 35 40 45
 Met Leu Asn Ser Tyr Ser
 50

<210> 7239
 <211> 252
 <212> PRT
 <213> S.epidermidis

<400> 7239
 Lys Tyr Gln Lys Tyr Leu Lys Ile Leu Asn Lys Val Val Pro Leu Asn
 1 5 10 15

Downloaded from www.jstor.org

Asp Asp Glu Thr Phe Lys Leu Gly Ile Val Leu Ser Tyr Leu Lys Gln
 20 25 30
 Tyr Arg Ala Ser Gln Asn Leu Leu Tyr Pro Leu Tyr Lys Lys Gly Lys
 35 40 45
 Phe Val Ser Ile Gln Met Tyr Asn Ala Leu Ser Phe Asn Phe Tyr Tyr
 50 55 60
 Leu Gly Asn Lys Asp Glu Ser Ile Glu Met Trp Asn Lys Leu Thr Gln
 65 70 75 80
 Ile Ser Glu Val Asp Val Gly Tyr Ala Pro Trp Val Ile Glu Glu Ser
 85 90 95
 Lys Thr Val Phe Glu Ser Arg Val Leu Pro Leu Leu Leu Asp Asp Asn
 100 105 110
 Asn His Tyr Arg Leu Tyr Gly Ile Phe Leu Leu His Gln Leu Asn Gly
 115 120 125
 Lys Glu Ile Leu Met Thr Glu Asp Ile Trp Ser Ile Leu Glu Ser Met
 130 135 140
 Asn Asp Tyr Glu Lys Leu Tyr Leu Thr Tyr Leu Val Gln Gly Leu Thr
 145 150 155 160
 Leu Asn Lys Leu Asp Phe Ile His Arg Gly Met Gln Arg Leu Tyr Asn
 165 170 175
 Phe Lys Lys Phe Lys Tyr Asn Thr Ser Leu Phe Thr Asp Trp Ile Asn
 180 185 190
 Gln Ala Glu Met Ile Ile Ala Glu Asn Val Asp Leu Val Asp Val Asp
 195 200 205
 Arg Tyr Val Ala Ala Phe Val Tyr Leu Ser Tyr Arg Arg Ser Ser Gln
 210 215 220
 Pro Leu Thr Lys Arg Gln Leu Met Asp Asp Phe Asn Val Ser Arg Tyr
 225 230 235 240
 Lys Leu Asn Lys Ala Ile Glu Phe Ile Leu Ser Ile
 245 250

<210> 7240

<211> 226

<212> PRT

<213> S.epidermidis

<400> 7240

Met Ala Gln Lys Glu Asn Asn Ile Ile Pro Met Ile Phe Asp Glu Ala
 1 5 10 15
 Phe Tyr Arg Lys Met Ala Thr Gln Lys Trp Arg Gln Gln Asp Tyr Lys
 20 25 30
 Lys Ala Ala Glu Tyr Tyr Glu Lys Val Leu Glu Leu Ser Pro Lys Asp
 35 40 45
 Phe Asp Ile Gln Gln His Tyr Ala Gln Cys Leu Val Lys Leu Asn Ile
 50 55 60
 Gly Lys Lys Ala Glu Arg Leu Phe Tyr Glu Asn Ile Val Lys Asp Phe
 65 70 75 80
 His Val Ala Glu Ser Phe Tyr Glu Leu Ser Gln Leu Asn Ile Glu Leu
 85 90 95
 Asn Glu Pro Asn Lys Ala Phe Leu Phe Gly Ile Asn Tyr Val Ile Leu
 100 105 110
 Ser Glu Asp Lys Asp Phe Arg Glu Met Leu Glu Lys Thr Phe Glu Val
 115 120 125
 Thr Tyr Thr Asn Glu Gln Lys Ile Glu Leu Glu Ala Gln Leu Phe Ser
 130 135 140
 Thr Gln Leu Leu Phe Gln Phe Leu Phe Ser Gln Gly Arg Leu Glu Glu

<212> PRT

<213> S.epidermidis

<400> 7243

```

Ser Met Lys Asn Leu Val Leu Leu Gly Gly Gly Tyr Gly Asn Met Arg
1      5      10      15
Ile Met Ser Arg Ile Leu Pro His Ser Ile Pro Glu Gly Tyr His Leu
20     25     30
Thr Leu Ile Asp Arg Met Pro Phe His Gly Leu Lys Pro Glu Phe Tyr
35     40     45
Ala Leu Ala Ala Gly Thr Lys Ser Asp Lys Glu Val Arg Ile Gln Phe
50     55     60
Pro Asp Ser Ser Gln Ile Asn Thr Val Tyr Gly Glu Ile Ser Asp Ile
65     70     75     80
Asp Leu Asp Glu Gln Met Ile Thr Val Gly Asn Ser Lys Ile Asp Tyr
85     90     95
Asp Glu Leu Ile Ile Gly Leu Gly Cys Glu Asp Lys Tyr His Asn Val
100    105    110
Pro Gly Ala Glu Ala Tyr Thr His Ser Ile Gln Thr Leu Ser Lys Ser
115    120    125
Arg Glu Thr Tyr His Arg Ile Ser Glu Leu Pro Lys Gly Ala Arg Val
130    135    140
Gly Ile Val Gly Ala Gly Leu Ser Gly Ile Glu Leu Ala Ser Glu Leu
145    150    155    160
Arg Glu Ser Arg Ser Asp Leu Glu Ile Leu Leu Tyr Asp Arg Gly Pro
165    170    175
Arg Ile Leu Arg Asn Phe Pro Glu Lys Leu Ser Lys Tyr Ile Ser Asn
180    185    190
Trp Phe Ser Lys His Asn Val Thr Val Val Pro Asn Ser Val Ile Asp
195    200    205
Arg Val Glu Pro Gly Lys Ile Tyr Asn Asn Gly Lys Pro Glu Asn Ile
210    215    220
Asp Leu Val Val Trp Thr Ala Gly Ile Gln Pro Val Glu Ile Val Arg
225    230    235    240
Asn Leu Pro Ile Asp Met Ser Thr Thr Gly Arg Val Ile Ile Asn Gln
245    250    255
Tyr His Gln Val Pro Thr Tyr Arg Asn Val Tyr Val Val Gly Asp Cys
260    265    270
Ala Asn Leu Pro His Ala Pro Ser Ala Gln Leu Ala Glu Leu Gln Gly
275    280    285
Glu Gln Ile Ala Glu Val Leu Lys Lys Gln Trp Asn Asn Glu Pro Leu
290    295    300
Pro Asp Lys Met Pro Glu Ile Lys Val Gln Gly Phe Leu Gly Ser Leu
305    310    315    320
Gly Asp Lys Gln Gly Phe Ala Tyr Ile Met Asp Arg Thr Val Thr Gly
325    330    335
Arg Leu Ala Ser Ile Leu Lys Ser Gly Val Leu Trp Arg Tyr Lys Tyr
340    345    350
His Asn Gly
355

```

<210> 7244

<211> 398

<212> PRT

<213> S.epidermidis

<400> 7244

```

Phe Lys Glu Lys Lys Gly Ser Ile Met Ser Glu Tyr Val Leu Thr Asn
1      5      10
Gly Ile Val Tyr Thr Glu Asn Glu Met Ile Asn Asn Gly Tyr Val His
20      25      30
Ile Lys Asp Gly Lys Ile Leu Asp Val Gly Lys Cys Pro Phe His Pro
35      40      45
Ser Ser Ser His Asn Thr Ile Asp Ile Ile Asp Val Lys Lys Arg His
50      55      60
Ile Leu Pro Gly Phe Ile Asp Ile His Ile His Gly Gly Tyr Gly Glu
65      70      75      80
Asp Ala Met Asp Ala Ser Glu Gln Gly Leu Gln His Leu Ala Glu Ser
85      90      95
Leu Leu Ser Glu Gly Thr Thr Ser Phe Leu Ala Thr Thr Met Thr Gln
100      105      110
Ser Thr Val Asn Ile Glu Arg Ala Leu Gln Thr Ile Ala Lys Tyr Thr
115      120      125
Gln Gln Gln Asp Val Thr Asn Ala Ala Glu Ile Val Gly Val His Leu
130      135      140
Glu Gly Pro Phe Ile Ser Glu His Lys Val Gly Ala Gln His Pro Gln
145      150      155      160
Phe Val Gln Arg Pro Thr Val Asp Lys Ile Lys Ser Phe Gln Glu Val
165      170      175
Ala Asn Gly Leu Ile Lys Ile Ile Thr Tyr Ala Pro Glu Val Asp Gly
180      185      190
Ala Thr Glu Thr Leu Lys Thr Met Lys Asn Asp Ile Ile Phe Ser Ile
195      200      205
Gly His Thr Val Ala Thr Phe Asp Gln Ala Asn Thr Ala Val Ser His
210      215      220
Gly Ala Lys His Ile Thr His Leu Tyr Asn Ala Ala Thr Gly Phe Gln
225      230      235      240
His Arg Glu Pro Gly Val Phe Gly Ala Ala Trp Leu Asn Gln Gly Leu
245      250      255
His Thr Glu Met Ile Val Asp Gly Val His Ser His Pro Ala Ser Ile
260      265      270
Ala Leu Ala Tyr Arg Leu Lys Gly Asn Gln Ser Cys Tyr Leu Ile Thr
275      280      285
Asp Ala Met Arg Ala Lys Gly Met Pro Glu Gly His Tyr Asp Leu Gly
290      295      300
Gly Gln Asp Val Ile Val Lys Gly Ser Glu Ala Arg Leu Ser Ser Gly
305      310      315      320
Ala Leu Ala Gly Ser Ile Leu Lys Met Asn Glu Gly Leu Lys Asn Leu
325      330      335
Ile Gln Phe Thr Gly Asp Thr Ile Glu His Leu Trp Arg Val Thr Ser
340      345      350
Leu Asn Gln Ala Ile Thr Leu Gly Ile Asp Asp Ile Lys Gly Ser Ile
355      360      365
Lys Ile Gly Lys Asp Ala Asp Ile Val Ile Ile Asp Asp Ala Cys Asn
370      375      380
Val Glu Thr Thr Ile Lys Asn Gly Lys Tyr His Ala Phe Lys
385      390      395

```

<210> 7245

<211> 185

<212> PRT

<213> S.epidermidis

<400> 7245

Arg Glu Arg Asn Thr Leu Glu Leu Gln Glu Ala Ile Ser Asn Arg Arg
 1 5 10 15
 Ser Val Lys Lys Phe Lys His Asp Met Val Val Asp Asp Gln Thr Val
 20 25 30
 Tyr Asp Ala Ile Tyr Lys Ala Thr Asp Ala Pro Asn His Gly Met Arg
 35 40 45
 Glu Pro Trp Arg Leu Val His Ile Ser Lys Asp Lys Leu Gly Asp Phe
 50 55 60
 Ser Arg Asp Ile Thr Arg Phe Ala Phe Pro Asp Ser Pro Asp Lys Arg
 65 70 75 80
 Glu Asp His Phe His Ala Val Thr Asn Leu Gly Gly Met Leu Leu Leu
 85 90 95
 Ile Leu Lys Asp Asp Pro Arg Gln Arg Gln Ser Arg Glu Asn Tyr Phe
 100 105 110
 Ala Phe Gly Ala Phe Ala Gln Asn Leu Met Leu Leu Leu Tyr Glu Ala
 115 120 125
 Gly Ile Gly Thr Cys Trp Lys Ser Pro Gln Tyr Ile Phe Asp Pro Lys
 130 135 140
 Ile Arg Lys Ala Leu Gly Val Lys Asp Asn Glu Ile Leu Ala Gly Phe
 145 150 155 160
 Leu Tyr Leu Thr Asp Leu Glu Glu Val Pro Thr Lys Ala Lys Arg Lys
 165 170 175
 Asn Lys Asn Leu Ile Thr Glu Phe Glu
 180 185

<210> 7246

<211> 46

<212> PRT

<213> S.epidermidis

<400> 7246

Leu Leu Arg Lys Asn Asn Ile Lys Arg Asn Arg Ile Leu Met Ile Val
 1 5 10 15
 Leu Pro Leu Ile Lys Leu Val Phe Tyr Gln Ala Thr Ser Asn Ser Val
 20 25 30
 Tyr Asp Ser Val Thr Arg Cys Leu Phe Leu Cys Ser His Phe
 35 40 45

<210> 7247

<211> 324

<212> PRT

<213> S.epidermidis

<400> 7247

Lys Val Gly Lys Ile Met Gln Met Ser Ala Asn Lys Lys Ile Ser Ile
 1 5 10 15
 Leu Val Val Met Ala Ile Cys Met Ala Ile Phe Tyr Leu Leu Val Gly
 20 25 30
 Leu Asp Phe Asp Ile Phe Glu Tyr Gln Phe Gln Ser Arg Phe Lys Lys
 35 40 45
 Phe Ile Leu Ile Leu Leu Val Gly Ala Ser Ile Gly Thr Ser Val Val
 50 55 60
 Ile Phe Gln Ser Ile Thr Thr Asn Arg Leu Leu Thr Pro Ser Ile Met
 65 70 75 80

Gly Leu Asp Ser Val Tyr Leu Phe Val Lys Val Leu Pro Ile Phe Ile
 85 90 95
 Leu Gly Glu Gln Ala Thr Val Val Thr Asn Ile Tyr Leu Asn Phe Leu
 100 105 110
 Ile Thr Leu Ile Ala Met Val Phe Phe Ser Leu Leu Leu Phe Gln Val
 115 120 125
 Ile Phe Lys Leu Gly His Phe Ser Val Tyr Phe Ile Leu Leu Val Gly
 130 135 140
 Val Ile Leu Gly Thr Phe Phe Arg Ser Ile Thr Ser Phe Leu Gln Leu
 145 150 155 160
 Ile Met Asn Pro Glu Ser Phe Leu Ala Val Gln Asn Val Met Phe Ala
 165 170 175
 Ser Phe Glu Ala Ser Asn Ser Lys Leu Val Thr Val Ser Gly Ile Leu
 180 185 190
 Leu Val Ile Leu Ile Ile Val Thr Ile Ile Leu Arg Pro Tyr Leu Asp
 195 200 205
 Val Leu Leu Leu Gly Arg Ala Gln Ala Ile Asn Leu Gly Val Ser Tyr
 210 215 220
 Glu Asn Met Thr Arg Met Phe Leu Ile Leu Val Ala Leu Leu Val Ser
 225 230 235 240
 Ile Ser Thr Ala Leu Ile Gly Pro Val Thr Phe Leu Gly Leu Leu Thr
 245 250 255
 Val Asn Leu Ala His Glu Phe Met Lys Thr Tyr Glu His Lys Phe Ile
 260 265 270
 Leu Pro Ala Thr Ile Leu Phe Ser Trp Ile Ser Leu Phe Ile Ala Gln
 275 280 285
 Trp Val Val Glu Asn Leu Phe Glu Ala Thr Thr Glu Phe Ser Leu Ile
 290 295 300
 Val Asp Leu Val Gly Gly Ser Tyr Phe Ile Tyr Leu Leu Val Lys Arg
 305 310 315 320
 Arg Asn Ala Asn

<210> 7248

<211> 199

<212> PRT

<213> S.epidermidis

<400> 7248

Thr Glu Gly Lys Asn Phe Ala Ile Leu Asn Thr Tyr Ile Thr Asn Arg
 1 5 10 15
 Glu Cys Lys Ser Met Thr Arg Gln Arg Ile Ala Ile Asp Met Asp Glu
 20 25 30
 Val Leu Ala Asp Thr Leu Gly Ala Val Val Lys Ala Val Asn Glu Arg
 35 40 45
 Ala Asp Leu Asn Ile Lys Met Glu Ser Leu Asn Gly Lys Lys Leu Lys
 50 55 60
 His Met Ile Pro Glu His Glu Gly Leu Val Met Asp Ile Leu Lys Glu
 65 70 75 80
 Pro Gly Phe Phe Arg Asn Leu Asp Val Met Pro His Ala Gln Glu Val
 85 90 95
 Val Lys Gln Leu Asn Glu His Tyr Asp Ile Tyr Ile Ala Thr Ala Ala
 100 105 110
 Met Asp Val Pro Thr Ser Phe His Asp Lys Tyr Glu Trp Leu Leu Glu
 115 120 125
 Tyr Phe Pro Phe Leu Asp Pro Gln His Phe Val Phe Cys Gly Arg Lys

130 135 140
 Asn Ile Ile Leu Ala Asp Tyr Leu Ile Asp Asp Asn Pro Lys Gln Leu
 145 150 155 160
 Glu Ile Phe Glu Gly Lys Ser Ile Met Phe Thr Ala Ser His Asn Val
 165 170 175
 Asn Glu His Arg Phe Glu Arg Val Ser Gly Trp Arg Asp Val Lys Asn
 180 185 190
 Tyr Phe Asn Ser Ile Glu Lys
 195

<210> 7249
 <211> 42
 <212> PRT
 <213> S.epidermidis

<400> 7249
 Asn Ser Leu Lys Phe Glu Glu Phe Lys Val Glu Ile Ile Ile Cys Lys
 1 5 10 15
 Met Asp Phe Thr Leu Ala Leu Leu Phe Ile Leu Val Ala Asn Asp Asp
 20 25 30
 Met Ile Asn His Tyr Val Gln Val Lys Leu
 35 40

<210> 7250
 <211> 49
 <212> PRT
 <213> S.epidermidis

<400> 7250
 Leu Val Leu Lys Met Leu Leu Lys Ser Ser Cys Leu Leu Lys Leu Lys
 1 5 10 15
 Ser Ser Ser Cys Lys Leu Gln Leu Phe Ile Lys Ile Leu Asn Ser Phe
 20 25 30
 Gly Gly Asp Glu Ile Cys Gln Ile Gln Ser Leu Ser Leu Met Lys Ile
 35 40 45
 Lys

<210> 7251
 <211> 171
 <212> PRT
 <213> S.epidermidis

<400> 7251
 Val Leu Met Lys Lys Leu Ile Thr Ser Leu Leu Val Leu Gly Leu Val
 1 5 10 15
 Leu Thr Gly Val Ser Val Gly Asn Asn Val Glu Ala Ala Thr Gly Asn
 20 25 30
 Ser Met Lys Thr Val Gln Gln Leu Asn Lys Gly Asp Lys Ser Leu Glu
 35 40 45
 Asn Val Lys Ile Gly Glu Ser Met Lys Ser Val Leu Lys Lys Tyr Ser
 50 55 60
 His Pro Ile Tyr Ser Tyr Asn Pro Asn Ser Asn Glu Lys Tyr Tyr Glu
 65 70 75 80
 Phe Arg Thr Asp Lys Gly Val Leu Leu Val Thr Ala Asn Gly Lys Lys
 85 90 95

Glu	Arg	Gly	Asn	Val	Thr	Arg	Val	Ser	Met	Thr	Tyr	Asn	Asp	Ala	Asn
			100					105					110		
Gly	Pro	Ser	Tyr	Lys	Ala	Val	Lys	Gln	Gln	Leu	Gly	His	Lys	Ala	Ile
		115					120					125			
Ser	Arg	Val	His	Tyr	Asn	Asn	Val	Thr	Gly	Asn	Phe	Gly	Tyr	Ile	Gln
	130					135					140				
Lys	Asp	Gln	Ala	Ser	Tyr	Gln	Phe	Ser	Ser	Asn	Ser	Pro	Lys	Asp	Lys
145					150					155					160
Asn	Val	Lys	Leu	Tyr	Arg	Ile	Asp	Leu	Asn	Lys					
				165					170						

<210> 7252

<211> 414

<212> PRT

<213> S.epidermidis

<400> 7252

Thr	Arg	Met	Lys	Lys	Gln	Ile	Ile	Glu	Arg	Leu	Thr	Arg	Tyr	Val	Lys
1				5					10					15	
Ile	Asp	Thr	Gln	Ser	Asn	Pro	Asp	Ser	Lys	Thr	Thr	Pro	Ser	Thr	Asn
			20					25					30		
Lys	Gln	Trp	Asp	Leu	Leu	Asn	Leu	Leu	Glu	Glu	Glu	Leu	Gln	Ser	Leu
		35				40						45			
Gly	Leu	Lys	Thr	Asp	Met	Asp	Glu	His	Gly	Tyr	Leu	Phe	Ala	Thr	Leu
	50					55					60				
Glu	Ser	Asn	Ile	Asn	Tyr	Asn	Val	Pro	Thr	Val	Gly	Phe	Leu	Ala	His
65					70					75					80
Val	Asp	Thr	Ser	Pro	Asp	Phe	Asn	Ala	Ser	His	Val	Asn	Pro	Gln	Ile
				85					90					95	
Ile	Glu	Ala	Tyr	Asn	Gly	Gln	Pro	Ile	Lys	Leu	Gly	Glu	Ser	Gln	Arg
			100					105						110	
Ile	Leu	Asp	Pro	Asp	Val	Phe	Pro	Glu	Leu	Asn	Lys	Val	Val	Gly	His
		115					120						125		
Thr	Leu	Met	Val	Thr	Asp	Gly	Thr	Ser	Leu	Leu	Gly	Ala	Asp	Asp	Lys
	130					135					140				
Ala	Gly	Val	Val	Glu	Ile	Met	Glu	Gly	Ile	Lys	Tyr	Leu	Ile	Asp	His
145					150					155					160
Pro	Asp	Ile	Lys	His	Gly	Thr	Ile	Arg	Val	Gly	Phe	Thr	Pro	Asp	Glu
				165					170					175	
Glu	Ile	Gly	Arg	Gly	Pro	His	Gln	Phe	Asp	Val	Ser	Arg	Phe	Asn	Ala
			180					185					190		
Asp	Phe	Ala	Tyr	Thr	Met	Asp	Gly	Ser	Gln	Leu	Gly	Glu	Leu	Gln	Phe
		195				200						205			
Glu	Ser	Phe	Asn	Ala	Ala	Glu	Val	Thr	Val	Thr	Cys	His	Gly	Val	Asn
	210					215					220				
Val	His	Pro	Gly	Ser	Ala	Lys	Asn	Ala	Met	Val	Asn	Ala	Ile	Ser	Leu
225					230					235					240
Gly	Gln	Gln	Phe	Asn	Ser	Leu	Leu	Pro	Leu	His	Glu	Val	Pro	Glu	Arg
				245					250					255	
Thr	Glu	Gly	Tyr	Glu	Gly	Phe	Tyr	His	Leu	Met	Asn	Phe	Thr	Gly	Asn
			260					265					270		
Val	Glu	Lys	Ala	Thr	Leu	Gln	Tyr	Ile	Ile	Arg	Asp	His	Asp	Lys	Glu
		275					280					285			
Gln	Phe	Glu	Leu	Arg	Lys	Lys	Arg	Met	Met	Glu	Ile	Arg	Asp	Asp	Ile
	290					295					300				
Asn	Val	His	Tyr	Asn	His	Phe	Pro	Ile	Lys	Val	Asp	Val	His	Asp	Gln

115 120 125
 Phe Leu Thr Ser Asp Leu Phe Asn Leu Tyr Val Met Phe Glu Ile Met
 130 135 140
 Leu Leu Ala Ser Phe Val Leu Val Thr Leu Gly Gln Ser Val Glu Gln
 145 150 155 160
 Leu Arg Ala Ala Ile Val Tyr Val Val Leu Asn Ile Leu Gly Ser Trp
 165 170 175
 Leu Leu Leu Leu Gly Ile Gly Met Leu Tyr Lys Thr Val Gly Thr Leu
 180 185 190
 Asn Phe Ser His Leu Ala Met Arg Leu Asn His Met Glu Asn Asn Gln
 195 200 205
 Thr Ile Thr Met Ile Ser Leu Val Phe Leu Val Ala Phe Ser Ser Lys
 210 215 220
 Ala Ala Leu Val Ile Phe Met Trp Leu Pro Lys Ala Tyr Ala Val Leu
 225 230 235 240
 Asn Thr Glu Leu Ala Ala Leu Phe Ala Ala Leu Met Thr Lys Val Gly
 245 250 255
 Ala Tyr Ala Leu Ile Arg Phe Phe Thr Leu Leu Phe Asp His His Pro
 260 265 270
 Ser Val Thr His Thr Leu Leu Val Phe Met Ala Cys Ile Thr Met Ile
 275 280 285
 Ile Gly Ala Phe Gly Val Ile Ala Tyr Lys Asp Ile Lys Lys Ile Ala
 290 295 300
 Ala Tyr Gln Val Ile Leu Ser Ile Gly Phe Ile Ile Leu Gly Leu Gly
 305 310 315 320
 Ser His Thr Ile Ser Gly Val Asn Gly Ala Ile Phe Tyr Leu Ala Asn
 325 330 335
 Asp Ile Ile Val Lys Thr Leu Leu Phe Phe Val Ile Gly Ser Leu Val
 340 345 350
 Tyr Met Ser Gly Tyr Arg Asn Tyr Gln Tyr Leu Ser Gly Leu Ala Lys
 355 360 365
 Arg Glu Pro Phe Phe Gly Val Ala Phe Val Val Val Ile Phe Ala Ile
 370 375 380
 Gly Gly Val Pro Pro Phe Ser Gly Phe Pro Gly Lys Val Leu Ile Phe
 385 390 395 400
 Gln Gly Ala Ile Thr Asn Gly Asn Tyr Ile Gly Leu Ala Leu Met Ile
 405 410 415
 Val Thr Ser Leu Ile Ala Met Tyr Ser Leu Phe Arg Val Met Phe Ile
 420 425 430
 Met Tyr Phe Gly Asp Ala Asp Gly Glu Gln Val Gln Phe Arg Pro Leu
 435 440 445
 Pro Ile Tyr Arg Lys Gly Leu Leu Ser Val Leu Val Val Val Val Leu
 450 455 460
 Ala Met Gly Ile Ala Ala Pro Val Val Leu Lys Val Thr Glu Asp Ala
 465 470 475 480
 Thr Asn Leu Asn Met Lys Glu Asp Val Phe Gln Lys Asn Val Asn Thr
 485 490 495
 His Leu Lys Glu Val Asn His Lys
 500

<210> 7255

<211> 655

<212> PRT

<213> S.epidermidis

<400> 7255

Trp Gly Val Lys Lys Met Arg Ile Thr Glu Leu Leu Thr Lys Glu Thr
 1 5 10 15
 Ile Ala Met Asp Leu Asp Ala Ser Asp Lys Ser Gly Val Ile Thr Glu
 20 25 30
 Leu Val Asn Gln Leu Asp Lys Ala Gly Lys Leu Ser Asp Pro Val Ser
 35 40 45
 Phe Lys Glu Ala Ile His Asn Arg Glu Ser Gln Ser Thr Thr Gly Ile
 50 55 60
 Gly Gly Gly Ile Ala Ile Pro His Ala Lys Val Ala Ala Val Lys Thr
 65 70 75 80
 Pro Ala Ile Ala Phe Gly Lys Ser Lys Glu Gly Val Asp Tyr Gln Ser
 85 90 95
 Leu Asp Met Gln Pro Ala His Leu Phe Met Ile Ala Ala Pro Glu
 100 105 110
 Gly Gly Ala Gln Thr His Leu Asp Ala Leu Ala Lys Leu Ser Gly Ile
 115 120 125
 Leu Met Asp Glu Lys Ile Arg Glu Lys Leu Ile His Ala Glu Ser Pro
 130 135 140
 Glu Glu Val Leu Asn Ile Ile Asp Glu Ala Asp Asp Glu Ala Thr Lys
 145 150 155 160
 Glu Glu Glu Ala Glu Ala Asn Glu Asn Ala Thr Val Ser Thr Asp Asn
 165 170 175
 Ser Asn Gln Asp Asn Asn Glu Pro Tyr Val Leu Ala Val Thr Ala Cys
 180 185 190
 Pro Thr Gly Ile Ala His Thr Tyr Met Ala Arg Asp Ala Leu Lys Lys
 195 200 205
 Gln Ala Glu Lys Met Asn Ile Lys Ile Lys Val Glu Thr Asn Gly Ser
 210 215 220
 Ser Gly Ile Lys Asn His Leu Thr Glu Gln Asp Ile Glu Arg Ala Thr
 225 230 235 240
 Gly Ile Ile Val Ala Ala Asp Val His Val Glu Thr Asp Arg Phe Asp
 245 250 255
 Gly Lys Asn Val Val Glu Val Pro Val Ala Asp Gly Ile Lys Arg Pro
 260 265 270
 Glu Glu Leu Ile Asn Thr Ala Leu Asp Thr Asn Arg Lys Pro Phe Val
 275 280 285
 Ala Gln Gly Gly Ser Lys Lys His Asp Asp Asn Glu Glu Lys Leu Ser
 290 295 300
 Pro Gly Lys Ala Phe Tyr Lys His Leu Met Asn Gly Val Ser Asn Met
 305 310 315 320
 Leu Pro Leu Val Ile Ser Gly Gly Ile Leu Met Ala Ile Val Phe Leu
 325 330 335
 Phe Gly Ala Asn Ser Phe Lys Pro Asp Ser Ser Glu Tyr Asn Ala Phe
 340 345 350
 Ala Glu Gln Leu Trp Asn Ile Gly Lys Asn Ser Ala Phe Ala Leu Ile
 355 360 365
 Ile Pro Ile Leu Ala Gly Phe Ile Ala Arg Ser Ile Ala Asp Lys Pro
 370 375 380
 Gly Phe Ala Ala Gly Leu Val Gly Gly Met Leu Ala Ile Ser Gly Gly
 385 390 395 400
 Ser Gly Phe Ile Gly Gly Ile Ile Ala Gly Phe Leu Ala Gly Tyr Leu
 405 410 415
 Thr Gln Gly Ile Lys Tyr Ile Thr Arg Lys Leu Pro Gln Ala Ile Glu
 420 425 430
 Gly Leu Lys Pro Thr Leu Ile Tyr Pro Leu Leu Ser Val Ser Ile Thr
 435 440 445

Gly Leu Leu Met Val Tyr Val Phe Asn Pro Pro Ala Ala Trp Leu Asn
 450 455 460
 His Leu Leu Leu Asn Gly Leu Asn Ser Leu Ser Gly Ser Asn Ile Met
 465 470 475 480
 Leu Leu Gly Leu Val Ile Gly Ala Met Met Ala Ile Asp Met Gly Gly
 485 490 495
 Pro Phe Asn Lys Ala Ala Tyr Val Phe Ala Thr Ala Ala Leu Thr Glu
 500 505 510
 Gly Asn Ala Ala Pro Ile Thr Ala Ala Met Ile Gly Gly Met Ile Pro
 515 520 525
 Pro Leu Ala Ile Ala Thr Ala Met Leu Ile Phe Arg Arg Lys Phe Thr
 530 535 540
 Lys Glu Gln Arg Gly Ser Ile Val Pro Asn Tyr Val Met Gly Leu Ser
 545 550 555 560
 Phe Ile Thr Glu Gly Ala Ile Pro Phe Ala Ala Ala Asp Pro Leu Arg
 565 570 575
 Val Ile Pro Ser Met Met Val Gly Ser Gly Val Ala Gly Ala Ile Ala
 580 585 590
 Leu Gly Leu Gly Ser Ser Ile Lys Ala Pro His Gly Gly Ile Phe Val
 595 600 605
 Ile Ile Gly Thr Asp Phe Asn His Ile Leu Gln Thr Leu Ile Ala Leu
 610 615 620
 Val Val Gly Thr Leu Val Ser Ala Leu Ile Tyr Gly Phe Leu Lys Pro
 625 630 635 640
 Lys Val Thr Glu Asn Glu Ile Gln Ala Ser Gln Ala Met Asp Glu
 645 650 655

<210> 7256

<211> 262

<212> PRT

<213> S.epidermidis

<400> 7256

Ile Phe Lys Asn Ile Tyr Cys Leu Tyr Lys Lys Gly Val Thr Met Arg
 1 5 10 15
 Asp Lys Asp Asn Gln His Ser Arg Leu Tyr Tyr Ile Ile Leu Thr Ile
 20 25 30
 Val Ile Ile Ala Ile Cys Val Val Val Val Ile Leu Phe Asn Thr Leu
 35 40 45
 Lys Thr Asn Arg Ser His Ser Thr Asp Arg Tyr Ala Asp Phe Thr Glu
 50 55 60
 Leu Lys Lys Asp Thr Ile Lys Asn Lys Asp Trp Arg Ile Lys Thr Lys
 65 70 75 80
 His Arg Lys Asn Lys Asp Ile Leu Val Thr Ala Ile His Gly Gly Gly
 85 90 95
 Ile Glu Pro Gly Thr Thr Glu Ile Ala Arg Arg Ile Ser Asn Val Gly
 100 105 110
 Lys Tyr Asn Phe Tyr Thr Phe Glu Gly Leu Arg Lys Ser Asn Asn Asp
 115 120 125
 Gln Leu His Val Thr Ser Thr His Phe Asn Glu Pro Ile Leu Asp Lys
 130 135 140
 Leu Leu Lys Asn Thr Lys Glu Thr Leu Ser Ile His Gly Phe Ser Gly
 145 150 155 160
 Asp Asp Pro Ile Val Tyr Ile Gly Gly Lys Asp Lys Glu Met Ser His
 165 170 175
 Ser Ile Thr Lys Glu Leu Arg Lys Lys Asp Phe Thr Val Lys Glu Ser

			180					185					190				
Pro	Asn	Lys	Ile	Asp	Ala	Lys	Ser	Ser	Asp	Asn	Ile	Ala	Asn	Lys	Asn		
		195					200					205					
Glu	Ser	Asn	Ser	Gly	Val	Gln	Leu	Glu	Leu	Thr	Thr	Ala	Leu	Arg	Lys		
	210					215					220						
Gln	Phe	Phe	Lys	His	Tyr	Lys	Leu	Asp	Arg	His	Thr	Arg	Ser	Asp	Ser		
225					230					235					240		
Asp	Lys	Tyr	Thr	Lys	Asp	Phe	Tyr	Lys	Phe	Ala	Asn	Ala	Val	Gln	Lys		
				245					250					255			
Gly	Ile	Glu	Lys	Val	Asn												
			260														

<210> 7257

<211> 325

<212> PRT

<213> S.epidermidis

<400> 7257

Phe	Leu	Lys	Lys	Lys	Leu	Asn	Lys	Gly	Ala	Leu	Leu	Met	Val	Asn	Arg		
1				5					10					15			
Arg	Lys	Ile	Ser	Ile	Ile	Gly	Ala	Gly	His	Thr	Gly	Gly	Thr	Leu	Ala		
			20					25					30				
Phe	Ile	Leu	Ala	Gln	Lys	Glu	Leu	Gly	Asp	Ile	Val	Leu	Ile	Glu	Arg		
		35					40				45						
Gln	Gln	Ser	Glu	Gly	Met	Ala	Lys	Gly	Lys	Ala	Leu	Asp	Ile	Leu	Glu		
	50					55					60						
Ser	Gly	Pro	Ile	Trp	Gly	Phe	Asp	Thr	Ser	Val	His	Gly	Ser	Val	Asn		
65					70					75					80		
Ile	Glu	Asp	Ile	Lys	Asp	Ser	Asp	Ile	Val	Val	Met	Thr	Ala	Gly	Ile		
				85					90					95			
Pro	Arg	Lys	Ser	Gly	Met	Thr	Arg	Glu	Glu	Leu	Val	Gln	Thr	Asn	Glu		
			100					105					110				
Gln	Ile	Val	Arg	Glu	Thr	Ala	Leu	Gln	Ile	Ala	Thr	Tyr	Ala	Pro	His		
		115					120					125					
Ser	Ile	Ile	Ile	Val	Leu	Thr	Asn	Pro	Val	Asp	Val	Met	Thr	Tyr	Thr		
	130					135				140							
Ala	Phe	Lys	Ala	Ser	Gly	Phe	Pro	Lys	Glu	Arg	Ile	Ile	Gly	Gln	Ser		
145					150					155				160			
Gly	Ile	Leu	Asp	Ala	Ala	Arg	Tyr	Arg	Thr	Phe	Ile	Ala	Gln	Glu	Leu		
				165					170				175				
Asn	Val	Ser	Val	Lys	Asp	Val	Asn	Gly	Phe	Val	Leu	Gly	Gly	His	Gly		
			180					185					190				
Asp	Thr	Met	Leu	Pro	Leu	Ile	Asn	Asn	Thr	His	Ile	Asn	Gly	Ile	Pro		
		195					200					205					
Val	Lys	His	Leu	Ile	Ser	Glu	Glu	Lys	Ile	Asp	Gln	Ile	Val	Glu	Arg		
	210					215					220						
Thr	Arg	Lys	Gly	Gly	Ala	Glu	Ile	Val	Ala	Leu	Gly	Gln	Gly	Ser			
225					230					235				240			
Ala	Tyr	Tyr	Ala	Pro	Ala	Thr	Ala	Ile	Tyr	Glu	Thr	Ile	Asp	Ala	Ile		
				245					250					255			
Phe	Asn	Asp	Arg	Lys	Arg	Leu	Leu	Pro	Ser	Ile	Ala	Tyr	Leu	Glu	Gly		
				260				265					270				
Glu	Tyr	Gly	Cys	Ser	Asp	Ile	Cys	Phe	Gly	Val	Pro	Thr	Ile	Ile	Gly		
		275				280						285					
Tyr	Gln	Gly	Ile	Glu	Lys	Ile	Ile	Glu	Val	Asp	Met	Asn	Asn	Asp	Glu		
	290					295					300						

```
<210> 7258
<211> 279
<212> PRT
<213> S.epidermidis
```

Thr 1	Leu	Lys	Lys	Arg 5	Gly	Leu	Tyr	Ser	Met 10	Lys	Lys	Leu	Phe	Gly 15	Ile
Ile	Leu	Val	Leu	Ala 20	Leu	Thr	Ile	Ala 25	Leu	Ala	Ala	Cys	Gly 30	Gly	Gly
Lys	Asp	Lys	Glu	Lys	Thr	Ile	Thr	Val	Gly	Ala	Ser	Pro	Ala	Pro	His
Ala	Glu	Ile	Leu	Glu	Lys	Ala	Lys	Pro	Leu	Leu	Lys	Lys	Lys	Gly	Tyr
Asp 65	Leu	Lys	Ile	Lys	Pro	Ile	Asn	Asp	Tyr	Thr	Pro	Asn	Lys	Leu	80
Leu	Asp	Lys	Gly	Glu	Ile	Asp	Ala	Asn	Phe	Gln	His	Thr	Pro	Tyr	95
Leu	Asn	Thr	Glu	Ser	Lys	Glu	Lys	Gly	Tyr	Lys	Ile	Glu	Ser	Ala	Gly
Asn	Val	Glu	Leu	Glu	Pro	Met	Ala	Val	Tyr	Ser	Lys	Lys	Tyr	Lys	Ser
Leu	Lys	Asp	Leu	Pro	Lys	Gly	Ala	Thr	Val	Tyr	Val	Ser	Asn	Asn	Pro
Ala 145	Glu	Gln	Gly	Arg	Phe	Leu	Lys	Phe	Phe	Val	Asp	Glu	Gly	Leu	Ile
Lys	Leu	Lys	Lys	Gly	Val	Lys	Ile	Glu	Asn	Ala	Lys	Phe	Asp	Asp	Ile
Thr	Glu	Asn	Lys	Lys	Asp	Ile	Lys	Phe	Asn	Asn	Lys	Gln	Ser	Ala	Glu
Tyr	Leu	Pro	Lys	Ile	Tyr	Gln	Asn	Gln	Asp	Ala	Asp	Ala	Val	Ile	Ile
Asn	Ser	Asn	Tyr	Ala	Ile	Asp	Gln	Lys	Leu	Ser	Pro	Lys	Lys	Asp	Ser
Ile 225	Ala	Leu	Glu	Ser	Pro	Lys	Asp	Asn	Pro	Tyr	Ala	Asn	Leu	Ile	Ala
Val	Lys	Lys	Gly	His	Lys	Asp	Asp	Lys	Asn	Ile	Lys	Val	Leu	Met	Glu
Val	Leu	Gln	Ser	Lys	Glu	Ile	Gln	Asp	Tyr	Ile	Lys	Asp	Lys	Tyr	Asp
Gly	Ala	Val	Val	Pro	Ala	Lys									

```
<210> 7259
<211> 58
<212> PRT
<213> S.epidermidis
```

Phe Ile Asn Leu Val Phe His Glu Cys Val Asp Val Asn Ala Leu Tyr
1 5 10 15

Leu Val Asp Ala Thr Ile Gln Lys Phe Tyr Gly Lys Asp Tyr Val Leu
 20 25 30
 Arg Cys Gly Leu Thr Ala Ile Ile Leu Arg Ile Glu Ile Leu Leu Glu
 35 40 45
 Tyr Ile Asn Arg Gln Phe Ile Leu Tyr Gln
 50 55

<210> 7260

<211> 283

<212> PRT

<213> S.epidermidis

<400> 7260

Ile Gln Phe Asp Ser Arg Phe Ser Trp Trp Lys Leu Leu His Ile Phe
 1 5 10 15
 Ala Cys Gln Lys Glu Lys Cys Lys Leu Ile Gln Ile Arg Asn Leu Asp
 20 25 30
 Lys Thr Ile Asp Asn Lys Pro Ile Leu Lys Asp Ile Ser Val Asp Ile
 35 40 45
 Lys Lys Gly Lys Leu Thr Ser Leu Ile Gly Pro Asn Gly Ala Gly Lys
 50 55 60
 Ser Thr Leu Leu Ser Ala Ile Ser Arg Leu Phe Ser Tyr Glu Asn Gly
 65 70 75 80
 Ser Ile Leu Ile Glu Asp Lys Glu Ile Ser Glu Tyr Lys Thr Asp Asp
 85 90 95
 Leu Ala Lys Lys Leu Ser Ile Leu Lys Gln Ser Asn His Thr Asp Met
 100 105 110
 Asn Ile Thr Ile Glu Gln Leu Val Lys Phe Gly Arg Phe Pro Tyr Ser
 115 120 125
 Lys Gly Arg Met Lys Gln Glu Asp Tyr Asp Lys Val Glu Tyr Ala Leu
 130 135 140
 Asp Leu Leu Gln Leu Asn Glu Ile Lys His Arg Asn Ile Lys Thr Leu
 145 150 155 160
 Ser Gly Gly Gln Arg Gln Arg Ala Tyr Ile Ala Met Thr Ile Ala Gln
 165 170 175
 Asp Thr Asp Tyr Ile Leu Leu Asp Glu Pro Leu Asn Asn Leu Asp Met
 180 185 190
 Lys His Ser Val Gln Ile Met Gln Thr Leu Arg Asp Leu Cys Arg Gln
 195 200 205
 Leu Asn Lys Thr Ile Ile Ile Val Leu His Asp Ile Asn Phe Ala Ser
 210 215 220
 Cys Tyr Ser Asp Asp Ile Ile Ala Leu Lys Gln Gly Glu Leu Val Lys
 225 230 235 240
 Ala Asp Asp Lys Asp Asn Val Ile Gln Ser Asp Ile Leu Lys Ser Leu
 245 250 255
 Tyr Glu Met Glu Val Arg Ile Glu Glu Ile Arg Gly Gln Arg Ile Cys
 260 265 270
 Leu Tyr Tyr Asp Glu Thr Thr Phe Asp Ser Val
 275 280

<210> 7261

<211> 57

<212> PRT

<213> S.epidermidis

<400> 7261

Leu Glu Phe Glu Arg Cys Tyr Leu Lys Met Lys Gly Lys Glu Pro Ser
 1 5 10 15
 Asn Lys Tyr Phe Asp Lys Met Lys Pro Tyr Leu Ile Thr Leu Leu Tyr
 20 25 30
 Leu Ala Ile Phe Ile Ala Leu Tyr Leu Ile Tyr Gly Ser Gly Asp Thr
 35 40 45
 Gln Asn Asn Phe Ile Tyr Asn Glu Phe
 50 55

<210> 7262
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7262
 Ile Leu Leu Asp Arg Thr Lys Leu Phe Ile Tyr Tyr Asn Ile Ile Tyr
 1 5 10 15
 Phe Val Gln Val Asn Ile Leu Thr Phe Ile Lys Asn Ile Leu Phe Glu
 20 25 30
 Thr Tyr Thr Ser Leu Ser Phe Leu Trp
 35 40

<210> 7263
 <211> 61
 <212> PRT
 <213> S.epidermidis

<400> 7263
 Thr Cys Ser Asp Phe Phe Asp Ala Ser Phe Cys Met Ser Pro Tyr Val
 1 5 10 15
 Pro Pro Ile Tyr Leu Asn Thr Ile Ser Val Val Lys Lys Arg Asn Phe
 20 25 30
 Asn Ile Ile Gln Pro Asn Tyr Ile Thr Phe Met Phe Phe Lys Cys Leu
 35 40 45
 Asn Asn Met Ser Phe Asn Leu Gln Asp Met Leu Val Leu
 50 55 60

<210> 7264
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7264
 Lys Glu Pro Glu Thr Leu Ile Leu Ser Gln Ile Leu Phe Thr Tyr Ser
 1 5 10 15
 Gln Phe Ile Thr Glu Val Lys Val Val Leu Ser Tyr Ser Arg Tyr Cys
 20 25 30
 Cys His Arg Glu Leu Thr His Leu Ile
 35 40

<210> 7265
 <211> 423
 <212> PRT
 <213> S.epidermidis

<400> 7265

```

Ser Met His Glu Ser Ile Lys Ile His Ile Gly Arg Cys Gln Met Phe
1      5      10      15
Leu Leu Val Asn Ile Ile Gly Leu Phe Ile Phe Leu Gly Ile Gly Val
20      25      30
Ile Phe Ser Arg Asn Arg Lys Asn Ile Gln Trp Lys Ser Ile Phe Ile
35      40      45
Leu Val Ile Leu Asn Leu Phe Leu Ala Trp Phe Phe Ile Tyr Phe Pro
50      55      60
Trp Gly Arg Ala Gly Val Lys Gly Ala Ala Asn Gly Ile Ala Trp Val
65      70      75      80
Ile Glu Ser Ala His Glu Gly Thr Gly Phe Ala Phe Lys Ser Phe Thr
85      90      95
Ser Asn Lys Met Met Asp Met Ala Val Ser Ala Leu Phe Pro Ile Leu
100     105     110
Leu Val Val Pro Leu Phe Asp Ile Leu Met Tyr Phe Asn Ile Leu Pro
115     120     125
Lys Ile Ile Gly Gly Ile Gly Trp Val Leu Ala Lys Val Thr Arg Gln
130     135     140
Pro Lys Phe Glu Ser Phe Phe Gly Val Glu Met Met Phe Leu Gly Asn
145     150     155     160
Thr Glu Ala Leu Ala Val Ser Ser Glu Gln Leu Lys Arg Met Asn Glu
165     170     175
Met Arg Val Leu Thr Ile Ala Met Met Ser Met Ser Ser Val Ser Gly
180     185     190
Ala Ile Val Gly Ala Tyr Val Gln Met Ile Pro Gly Glu Leu Val Leu
195     200     205
Thr Ala Ile Pro Leu Asn Ile Ile Asn Ala Ile Ile Val Ser Cys Ile
210     215     220
Leu Asn Pro Val Ser Val Glu Glu Gln Glu Asp Val Val Tyr Ser Ile
225     230     235     240
Lys Asp His Gln Thr Glu Arg Gln Pro Phe Phe Ser Phe Leu Gly Asp
245     250     255
Ser Val Leu Ala Ala Gly Lys Leu Val Leu Ile Ile Ile Ala Phe Val
260     265     270
Ile Ser Phe Val Ala Leu Ala Asp Leu Ile Asp Arg Leu Ile His Leu
275     280     285
Ile Thr His Leu Ile Ala Asn Gly Ile Gly Val Lys Gly Ser Phe Gly
290     295     300
Leu Asp Gln Ile Leu Gly Val Phe Met Tyr Pro Phe Ala Leu Leu Leu
305     310     315     320
Gly Leu Pro Phe Asn Glu Ala Trp Glu Val Ala Gln Gln Met Ala Lys
325     330     335
Lys Ile Val Thr Asn Glu Phe Val Val Met Gly Glu Ile Ser Asn Gln
340     345     350
Val Asn Ala Met Thr Pro His His Arg Ala Val Ile Ser Thr Phe Leu
355     360     365
Val Ser Phe Ala Asn Phe Ser Thr Ile Gly Met Ile Ile Gly Thr Leu
370     375     380
Lys Gly Ile Val Asp Lys Lys Thr Ser Asp Phe Val Ser Lys Tyr Val
385     390     395     400
Pro Met Met Leu Leu Ala Gly Ile Leu Val Ser Leu Leu Thr Ala Ala
405     410     415
Phe Val Gly Leu Phe Ala Trp
420

```

<211> 659
 <212> PRT
 <213> S.epidermidis

<400> 7266

Arg	Lys	Asn	Asp	Ser	Leu	Leu	Lys	Thr	Glu	Glu	Thr	Asn	Met	Ser	Leu
1				5					10					15	
Pro	Lys	Lys	Lys	Ile	Gly	Ile	Phe	Ala	Phe	Phe	Leu	Leu	Thr	Val	Phe
			20				25						30		
Thr	Ile	Thr	Leu	Lys	Thr	Tyr	Phe	Ser	Tyr	Tyr	Val	Asp	Phe	Ser	Leu
	35					40					45				
Gly	Val	Lys	Gly	Leu	Val	Gln	Asn	Leu	Ile	Leu	Leu	Met	Asn	Pro	Tyr
	50					55					60				
Ser	Leu	Ile	Ala	Leu	Val	Leu	Ser	Val	Phe	Leu	Phe	Phe	Lys	Gly	Lys
65				70					75					80	
Lys	Ala	Phe	Trp	Phe	Ile	Phe	Ile	Gly	Gly	Phe	Leu	Leu	Thr	Phe	Leu
				85				90						95	
Leu	Tyr	Ala	Asn	Val	Val	Tyr	Phe	Arg	Phe	Phe	Ser	Asp	Phe	Leu	Thr
			100				105						110		
Phe	Ser	Thr	Leu	Asn	Gln	Ala	Gly	Asn	Val	Glu	Ser	Met	Gly	Gly	Ala
		115					120					125			
Val	Ser	Ala	Ser	Phe	Lys	Trp	Tyr	Asp	Phe	Val	Tyr	Phe	Ile	Asp	Thr
	130					135					140				
Ile	Ile	Tyr	Leu	Ala	Ile	Leu	Ile	Phe	Lys	Arg	Lys	Trp	Leu	Asp	Asn
145					150					155				160	
Arg	Ala	Phe	Ser	Lys	Lys	Phe	Val	Pro	Val	Val	Met	Ala	Thr	Ser	Val
				165				170						175	
Ala	Leu	Phe	Phe	Leu	Asn	Leu	Ala	Phe	Ala	Glu	Thr	Asp	Arg	Pro	Glu
			180					185					190		
Leu	Leu	Thr	Arg	Thr	Phe	Asp	His	Lys	Tyr	Leu	Val	Lys	Tyr	Leu	Gly
	195					200					205				
Pro	Tyr	Asn	Phe	Thr	Val	Tyr	Asp	Gly	Val	Lys	Thr	Ile	Glu	Asn	Asn
	210					215					220				
Gln	Gln	Lys	Ala	Leu	Ala	Ser	Glu	Asp	Asp	Leu	Thr	Lys	Val	Leu	Asn
225				230						235				240	
Tyr	Thr	Lys	Gln	Lys	Arg	Thr	Glu	Pro	Asn	Pro	Glu	Tyr	Tyr	Gly	Ala
			245					250						255	
Ala	Lys	Lys	Lys	Asn	Ile	Ile	Lys	Ile	His	Leu	Glu	Ser	Phe	Gln	Thr
			260				265						270		
Phe	Leu	Ile	Asn	Lys	Lys	Val	Asn	Gly	Lys	Glu	Val	Thr	Pro	Phe	Leu
	275					280						285			
Asn	Lys	Leu	Ser	Ser	Gly	Asn	Gln	Asp	Phe	Thr	Tyr	Phe	Pro	Asn	Phe
	290				295						300				
Phe	His	Gln	Thr	Gly	Gln	Gly	Lys	Thr	Ser	Asp	Ser	Glu	Phe	Thr	Met
305				310						315				320	
Asp	Asn	Ser	Leu	Tyr	Gly	Leu	Pro	Gln	Gly	Ser	Ala	Tyr	Ser	Leu	Lys
			325					330						335	
Gly	Asp	Asn	Thr	Tyr	Gln	Ser	Leu	Pro	Ala	Ile	Leu	Asp	Gln	Lys	Gln
			340				345						350		
Gly	Tyr	Thr	Ser	Asn	Val	Met	His	Gly	Asp	Tyr	Lys	Thr	Phe	Trp	Asn
	355					360						365			
Arg	Asp	Gln	Val	Tyr	Lys	His	Phe	Gly	Ile	Asp	Asn	Phe	Tyr	Asp	Ala
	370				375						380				
Thr	Tyr	Tyr	Asp	Met	Ser	Asp	Asp	Asn	Ile	Val	Asn	Leu	Gly	Leu	Lys
385				390						395				400	
Asp	Lys	Pro	Phe	Phe	Lys	Ala	Ser	Ala	Asp	Tyr	Gln	Ser	Lys	Met	Lys

405 410 415
 Lys Pro Phe Tyr Ser His Leu Ile Thr Leu Thr Asn His Tyr Pro Phe
 420 425 430
 Thr Leu Asp Glu Glu Asp Ala Ser Ile Asp Lys Pro Asn Thr Gly Asp
 435 440 445
 Ser Thr Val Asp Gly Tyr Ile Gln Thr Ala His Tyr Leu Asp Gln Ala
 450 455 460
 Leu Glu Glu Tyr Ile Thr Asp Leu Lys Lys Lys Gly Leu Tyr Asp Asn
 465 470 475 480
 Ser Val Ile Met Ile Tyr Gly Asp His Tyr Gly Ile Ser Glu Asn His
 485 490 495
 Asn Asn Ala Met Glu Lys Leu Leu Gly Glu Lys Ile Thr Pro Ala Lys
 500 505 510
 Phe Thr Asp Leu Asn Arg Thr Gly Phe Trp Leu Lys Val Pro Gly Lys
 515 520 525
 Ser Gly Gly Val Asn Lys Glu Tyr Ala Gly Gln Met Asp Val Met Pro
 530 535 540
 Thr Leu Leu His Leu Val Gly Ile Asp Ser Lys Asn Tyr Leu Met Phe
 545 550 555 560
 Gly Ser Asp Met Phe Ser Lys Gln His Asn Asn Val Val Pro Phe Arg
 565 570 575
 Asn Gly Asp Phe Ile Thr Glu Asp Tyr Lys Tyr Val Asn Gly Lys Ile
 580 585 590
 Tyr Ser Asn Lys Asp Asn Glu Leu Leu Thr Glu Lys Pro Lys Asp Phe
 595 600 605
 Asp Lys Asn Lys Lys Gln Val Glu Lys Asp Leu Glu Met Ser Asp Ser
 610 615 620
 Val Leu Asn Gly Asp Leu Phe Arg Phe Tyr Lys Asn Pro Asp Phe Lys
 625 630 635 640
 Lys Val Asn Pro Gly Lys Tyr Glu Tyr Lys Ser Gly Pro Lys Gly Asn
 645 650 655
 Glu Lys Lys

<210> 7267

<211> 249

<212> PRT

<213> S.epidermidis

<400> 7267

Leu Leu Leu Glu Val Asn His Leu Asn Leu Phe Leu Gly Lys Lys His
 1 5 10 15
 Ile Leu Lys Asp Ile Thr Phe Ser Leu Pro Ile Asn Gly Glu Ile Ile
 20 25 30
 Gly Ile Val Gly Pro Asn Gly Ala Gly Lys Ser Ser Leu Lys Ala
 35 40 45
 Phe Ile Gly Glu Phe Lys Ala Thr Gly Lys His Thr Leu Tyr Asp His
 50 55 60
 Pro Ile His Thr Gln Leu Arg Tyr Ile Thr Tyr Ile Pro Gln Lys Ala
 65 70 75 80
 His Ile Asp Leu Asp Phe Pro Ile Lys Val Asp Gln Val Ile Leu Ser
 85 90 95
 Gly Cys Tyr Glu Asp Ile Gly Trp Phe Lys Lys Ala Ser Val Val Glu
 100 105 110
 Lys Thr Lys Leu Asn Gln Leu Leu Asn Asp Leu Glu Leu Asp His Ile
 115 120 125

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 996
 997
 998
 999
 1000

Arg His Arg Gln Ile Ala Glu Leu Ser Gly Gly Gln Leu Gln Arg Val
 130 135 140
 Leu Val Ala Arg Ala Leu Met Ser Asn Ser Asp Ile Tyr Cys Leu Asp
 145 150 155 160
 Glu Pro Phe Val Gly Ile Asp Ile Tyr Ser Glu Gln Leu Ile Met Lys
 165 170 175
 Lys Ile Lys His Leu Arg His Met Gly Lys Leu Ile Leu Ile Val His
 180 185 190
 His Asp Leu Ser Lys Ala Asp Gln Tyr Phe Asp Arg Ile Leu Leu Leu
 195 200 205
 Asn Gln Ser Leu Gln Phe Leu Gly Pro Thr Lys Glu Ala Leu Ser Ser
 210 215 220
 Glu Arg Leu Asn Ala Thr Phe Ile Asn Tyr Lys Asp Asp Ser Leu Leu
 225 230 235 240
 Thr Leu Ser Ser Gln Gly Ser Thr Asn
 245

<210> 7268
 <211> 113
 <212> PRT
 <213> S.epidermidis

<400> 7268
 Ile Phe Leu Glu Val Asn Arg Met Ala Ile Lys Leu Ser Ser Ile Asp
 1 5 10 15
 Gln Phe Glu Gln Val Leu Glu Glu Asn Lys Tyr Val Phe Val Leu Lys
 20 25 30
 His Ser Glu Thr Cys Pro Ile Ser Ala Asn Ala Tyr Asp Gln Phe Asn
 35 40 45
 Lys Phe Leu Tyr Glu Arg Asp Ile Asp Gly Tyr Tyr Leu Ile Val Gln
 50 55 60
 Gln Glu Arg Lys Leu Ser Asp Tyr Ile Ala Glu Lys Thr Asn Val Lys
 65 70 75 80
 His Glu Ser Pro Gln Ala Phe Tyr Phe Val Asp Gly Glu Met Lys Trp
 85 90 95
 Asn Ala Asp His Asp Asp Ile Asn Val Ser Gln Leu Ala Gln Ala Glu
 100 105 110
 Glu

<210> 7269
 <211> 275
 <212> PRT
 <213> S.epidermidis

<400> 7269
 Gly Asp Leu Asp Met Ser Asp Leu Phe Gln Asn Ala Pro Pro Tyr Ile
 1 5 10 15
 Gln Ala Leu Ile Ala Gly Ile Ile Thr Trp Leu Leu Thr Ala Leu Gly
 20 25 30
 Ala Ala Ala Val Phe Ile Phe Lys Lys Val Asn Asp Lys Val Leu Asn
 35 40 45
 Ser Met Gln Gly Phe Ala Ala Gly Ile Met Ile Ala Ala Ser Phe Trp
 50 55 60
 Ser Leu Leu Gln Pro Ala Ile Glu Ser Ser Glu Asn Ser Ala Met Pro
 65 70 75 80

Trp Leu Pro Ala Ala Ile Gly Phe Ile Leu Gly Gly Val Phe Ile Arg
 85 90 95
 Val Leu Asp Tyr Ile Ile Pro His Ile His Gln Asn Ala Gln Asp Lys
 100 105 110
 Asn Gln Gln Gln Glu Gly Val Pro Thr Ser Leu Gly Lys Asn Ala Leu
 115 120 125
 Leu Val Leu Ala Ile Thr Leu His Asn Ile Pro Glu Gly Leu Ser Ile
 130 135 140
 Gly Val Ala Phe Gly Gly Val Val Ser Gly Asn Ser His Ala Thr Phe
 145 150 155 160
 Leu Gly Ala Ile Gly Leu Ala Ile Gly Ile Gly Ile Gln Asn Ile Pro
 165 170 175
 Glu Gly Ala Ala Leu Ser Met Pro Ile Arg Ala Ala Gly Ala Thr Arg
 180 185 190
 Trp Lys Ala Phe Asn Tyr Gly Gln Ala Ser Ala Ile Val Glu Pro Ile
 195 200 205
 Phe Ala Thr Ile Gly Ala Ala Ala Ile Leu Val Val Asn Pro Ile Leu
 210 215 220
 Pro Tyr Ala Leu Ala Phe Ala Ala Gly Ala Met Ile Phe Val Val Val
 225 230 235 240
 Glu Glu Leu Ile Pro Asp Ser Gln Ser Ser Asn Asn Thr Asp Leu Ala
 245 250 255
 Thr Leu Ser Leu Met Ile Gly Phe Thr Ile Met Met Ile Leu Asp Val
 260 265 270
 Ala Leu Gly
 275

<210> 7270

<211> 95

<212> PRT

<213> S.epidermidis

<400> 7270

Met Leu Ser Leu Tyr Val Met Lys Thr Leu Phe Leu Ile Ile Asn Ile
 1 5 10 15
 Val Leu Leu Lys Arg Phe Leu Leu Lys Leu Val Gly Ile Ser Phe Phe
 20 25 30
 Met Lys Val Gly Ile Ile Lys Tyr Phe Asp Val Leu Leu Leu Leu Asp
 35 40 45
 Lys Thr Phe Ile Lys Phe Pro Lys Asn Met Lys Lys Leu Leu Lys Lys
 50 55 60
 Glu Asn Arg Val Tyr Asn Ile Asp Val Asn Asp Asn His Tyr His Tyr
 65 70 75 80
 His Tyr His Tyr Phe Arg Ile Leu Thr Leu Tyr Ile Phe Asn Ile
 85 90 95

<210> 7271

<211> 428

<212> PRT

<213> S.epidermidis

<400> 7271

Tyr Leu Leu Glu Gly Lys Leu Ile Tyr Arg Lys Val Val Thr Ile Met
 1 5 10 15
 Ala Glu His Ser Phe Asp Val Lys Ala Val Ile Lys Asp Phe Pro Ile
 20 25 30

<400> 7272

Lys Asp Ile Glu Ala His Leu Leu Ser Ile Asn Leu Gln Met Arg Phe
 1 5 10 15
 Phe Phe Ile Val Phe Arg Leu Phe Ile Thr Val Ser Lys Tyr Leu Ser
 20 25 30
 Leu Asn His Leu Leu Asn Val Ser Ile Leu Ile Leu Tyr Tyr Asn Thr
 35 40 45
 Tyr Glu Leu Lys
 50

<210> 7273

<211> 327

<212> PRT

<213> S.epidermidis

<400> 7273

Ile Arg Ile Glu Lys Arg Val Arg Lys Gly Glu Cys Ser Met Ser Phe
 1 5 10 15
 Ala Ser Asp Met Lys Asn Glu Leu Thr Arg Ile Glu Val Asp Glu Ser
 20 25 30
 Asn Ala Lys Ala Glu Leu Ser Ala Leu Ile Arg Met Asn Gly Ala Leu
 35 40 45
 Ser Leu Ser Asn Gln Gln Phe Val Ile Asn Val Gln Thr Glu Asn Ala
 50 55 60
 Thr Thr Ala Arg Arg Ile Tyr Ser Leu Ile Lys Arg Ile Phe Asn Val
 65 70 75 80
 Glu Val Glu Ile Leu Val Arg Lys Lys Met Lys Leu Lys Lys Asn Asn
 85 90 95
 Ile Tyr Ile Cys Arg Thr Lys Met Leu Ala Lys Glu Ile Leu Asn Asp
 100 105 110
 Leu Gly Ile Leu Lys Lys Gly Val Phe Thr His Asp Ile Asp Pro Asp
 115 120 125
 Met Ile Lys Asp Asp Glu Met Lys Arg Ser Tyr Leu Arg Gly Ala Phe
 130 135 140
 Leu Ala Gly Gly Ser Val Asn Asn Pro Glu Thr Ser Ser Tyr His Leu
 145 150 155 160
 Glu Ile Phe Ser Gln Tyr Glu Asp His Ser Glu Gly Leu Thr Lys Leu
 165 170 175
 Met Asn Ser Tyr Glu Leu Asn Ala Lys His Leu Glu Arg Lys Lys Gly
 180 185 190
 Ser Ile Ala Tyr Leu Lys Glu Ala Glu Lys Ile Ser Asp Phe Leu Ser
 195 200 205
 Leu Ile Gly Gly Tyr Gln Ala Leu Leu Lys Phe Glu Asp Val Arg Ile
 210 215 220
 Val Arg Asp Met Arg Asn Ser Val Asn Arg Leu Val Asn Cys Glu Thr
 225 230 235 240
 Ala Asn Phe Asn Lys Thr Val Ser Ala Ala Met Lys Gln Val Glu Ser
 245 250 255
 Ile Gln Leu Ile Asp Glu Glu Ile Gly Leu Glu Asn Leu Pro Asp Arg
 260 265 270
 Leu Arg Glu Val Ala Lys Leu Arg Val Glu His Gln Glu Ile Ser Leu
 275 280 285
 Lys Glu Leu Gly Glu Met Val Ser Thr Gly Pro Ile Ser Lys Ser Gly
 290 295 300
 Met Asn His Arg Leu Arg Lys Leu Asn Glu Leu Ala Asp Lys Ile Arg
 305 310 315 320

<210> 7276
 <211> 435
 <212> PRT
 <213> S.epidermidis

<400> 7276

Asp	Tyr	Lys	Glu	Arg	Asp	Asn	Leu	Ala	Cys	His	Met	Phe	Ile	Ala	Phe
1				5					10					15	
Ile	Tyr	Ile	Val	Gly	Trp	Leu	Lys	Tyr	Tyr	Glu	Ser	Leu	Gly	Glu	Leu
			20					25					30		
Glu	Met	Ala	Gln	Asp	Arg	Lys	Lys	Val	Leu	Val	Leu	Gly	Ala	Gly	Tyr
		35					40					45			
Ala	Gly	Leu	Gln	Thr	Val	Thr	Lys	Leu	Gln	Lys	Glu	Leu	Ser	Ala	Asp
		50				55					60				
Ala	Ala	Glu	Ile	Thr	Leu	Ile	Asn	Lys	Asn	Glu	Tyr	His	Tyr	Glu	Ser
65					70					75					80
Thr	Trp	Leu	His	Glu	Ala	Ser	Ala	Gly	Thr	Ile	Asn	Tyr	Glu	Asp	Leu
				85					90					95	
Leu	Tyr	Pro	Val	Glu	Lys	Thr	Val	Asn	Lys	Asn	Lys	Val	Asn	Phe	Val
			100					105					110		
Val	Ala	Glu	Val	Thr	Lys	Ile	Asp	Arg	Asn	Ala	Lys	Arg	Val	Glu	Thr
		115					120					125			
Asp	Lys	Gly	Val	Tyr	Asp	Phe	Asp	Ile	Leu	Val	Val	Ala	Leu	Gly	Phe
		130				135					140				
Val	Ser	Glu	Thr	Phe	Gly	Ile	Asp	Gly	Met	Lys	Glu	His	Ala	Phe	Gln
145					150					155					160
Ile	Glu	Asn	Val	Leu	Thr	Ser	Arg	Lys	Leu	Ser	Arg	His	Ile	Glu	Asp
				165					170					175	
Lys	Phe	Ala	Asn	Tyr	Ala	Ala	Ser	Lys	Glu	Lys	Asp	Asp	Lys	Asp	Leu
			180					185					190		
Ser	Ile	Leu	Val	Gly	Gly	Ala	Gly	Phe	Thr	Gly	Ile	Glu	Phe	Leu	Gly
		195					200					205			
Glu	Leu	Thr	Asp	Arg	Ile	Pro	Glu	Leu	Cys	Ser	Lys	Tyr	Gly	Val	Asp
		210				215						220			
Gln	Ser	Lys	Val	Lys	Leu	Thr	Cys	Val	Glu	Ala	Ala	Pro	Lys	Met	Leu
225					230					235					240
Pro	Met	Phe	Ser	Asp	Asp	Leu	Val	Ser	Tyr	Ala	Val	Lys	Tyr	Leu	Glu
				245					250					255	
Asp	Arg	Gly	Val	Glu	Phe	Lys	Ile	Ala	Thr	Pro	Ile	Val	Ala	Cys	Asn
			260					265					270		
Glu	Lys	Gly	Phe	Val	Val	Glu	Val	Asn	Gly	Glu	Lys	Gln	Gln	Leu	Glu
		275					280					285			
Ala	Gly	Thr	Ser	Val	Trp	Thr	Ala	Gly	Val	Arg	Gly	Ser	His	Leu	Met
		290				295					300				
Glu	Glu	Ser	Phe	Glu	Gly	Val	Lys	Arg	Gly	Arg	Ile	Ile	Asn	Lys	Gln
305					310					315					320
Asp	Leu	Thr	Ile	Glu	Gly	His	Asn	Asp	Ile	Phe	Val	Ile	Gly	Asp	Cys
				325					330					335	
Ser	Ala	Phe	Ile	Pro	Ala	Gly	Glu	Glu	Arg	Pro	Leu	Pro	Thr	Thr	Ala
			340					345					350		
Gln	Ile	Ala	Met	Gln	Gln	Gly	Glu	His	Thr	Ala	Ser	Asn	Ile	Lys	Arg
		355					360					365			
Leu	Leu	Asn	Gly	Glu	Ser	Thr	Gln	Asp	Phe	Gln	Tyr	Val	Asn	Arg	Gly
		370				375					380				
Thr	Val	Cys	Ser	Leu	Gly	Ala	Asn	Asp	Gly	Val	Gly	Ile	Val	Tyr	Gly

385 390 395 400
 Arg Asp Ile Ala Gly Lys Lys Ala Ala Phe Leu Lys Lys Val Ile Asp
 405 410 415
 Thr Arg Ala Ile Tyr Lys Leu Gly Gly Ile Gly Leu Ala Phe Lys Lys
 420 425 430
 Gly Lys Phe
 435

<210> 7277
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7277
 Leu Lys Lys Asp Lys Tyr Leu Thr Lys Trp Ile Ile Thr Val Phe His
 1 5 10 15
 Leu Leu Lys Val Leu Phe Lys Pro Arg Asp Phe His Leu Ser Met Phe
 20 25 30
 Asn Lys Met Ile Val Thr Leu Asn
 35 40

<210> 7278
 <211> 63
 <212> PRT
 <213> S.epidermidis

<400> 7278
 Met Ala Glu Asp Lys Phe Glu Gln Ala Lys Gly Asn Ile Lys Glu Thr
 1 5 10 15
 Val Gly Asn Ala Thr Asp Asn Lys Glu Leu Glu Lys Asp Gly Lys Gly
 20 25 30
 Asp Lys Ala Ser Gly Lys Ala Lys Glu Ala Val Glu Asn Val Lys Glu
 35 40 45
 Lys Ala Asn Asp Val Ile Asp Lys Phe Lys Gly Asn Lys Gly Asp
 50 55 60

<210> 7279
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 7279
 Thr Arg Gly Asp Ile Leu Asn Ile Tyr Ile Ala Ile Val Leu Gly Leu
 1 5 10 15
 Ile Phe Val Phe Leu Ser Asp Met Asp Tyr Arg Arg Arg Asn Asn Ser
 20 25 30
 Thr Asn Met Asp Lys Lys Met Ile Lys Ile Ser Phe Phe Thr
 35 40 45

<210> 7280
 <211> 596
 <212> PRT
 <213> S.epidermidis

<400> 7280
 Met Val Leu Glu Lys Gln Lys Leu Thr Leu Leu Tyr Thr Gln Arg Asn

1				5					10				15			
Gly	Val	Thr	Arg	Arg	Arg	Lys	Met	Val	Phe	Glu	Gly	Val	Ile	Pro	Asn	
			20					25					30			
Ile	Asp	Arg	Arg	Tyr	His	Glu	Ser	Pro	Ser	Glu	Tyr	Thr	Arg	Glu	Met	
		35					40					45				
Met	Ser	Lys	Tyr	Met	Thr	Glu	Leu	Pro	Cys	Glu	Thr	Cys	His	Gly	Lys	
		50				55					60					
Arg	Leu	Ser	Lys	Glu	Ala	Leu	Ser	Val	Tyr	Val	Gly	Asp	Tyr	Asn	Ile	
65					70					75					80	
Gly	Glu	Val	Val	Glu	Tyr	Ser	Ile	Lys	Asn	Ala	Leu	Tyr	Tyr	Phe	Glu	
			85					90						95		
Asn	Leu	Lys	Leu	Ser	Asp	Gln	Asp	Lys	Ser	Ile	Ala	Asp	Gln	Ile	Leu	
			100					105					110			
Lys	Glu	Ile	Ile	Ser	Arg	Leu	Ser	Phe	Leu	Asn	Asn	Val	Gly	Leu	Glu	
		115					120					125				
Tyr	Leu	Thr	Leu	Asp	Arg	Ser	Ser	Gly	Thr	Leu	Ser	Gly	Gly	Glu	Ala	
	130					135					140					
Gln	Arg	Ile	Arg	Leu	Ala	Thr	Gln	Ile	Gly	Ser	Arg	Leu	Thr	Gly	Val	
145					150					155					160	
Leu	Tyr	Val	Leu	Asp	Glu	Pro	Ser	Ile	Gly	Leu	His	Gln	Arg	Asp	Asn	
				165					170					175		
Asp	Arg	Leu	Ile	Asn	Thr	Leu	Lys	Glu	Met	Arg	Asp	Leu	Gly	Asn	Thr	
			180					185				190				
Leu	Ile	Val	Val	Glu	His	Asp	Asp	Asp	Thr	Met	Arg	Ala	Ala	Asp	Tyr	
	195					200					205					
Leu	Val	Asp	Val	Gly	Pro	Gly	Ala	Gly	Asn	His	Gly	Gly	Glu	Val	Val	
	210					215					220					
Ser	Ser	Gly	Thr	Pro	Asn	Lys	Val	Met	Lys	Asp	Lys	Lys	Ser	Leu	Thr	
225					230					235					240	
Gly	Gln	Tyr	Leu	Ser	Gly	Lys	Lys	Arg	Ile	Glu	Val	Pro	Glu	Tyr	Arg	
				245					250					255		
Arg	Glu	Ile	Thr	Asp	Arg	Lys	Ile	Gln	Ile	Lys	Gly	Ala	Lys	Ser	Asn	
			260					265					270			
Asn	Leu	Lys	Asn	Val	Asn	Val	Asp	Phe	Pro	Leu	Ser	Val	Leu	Thr	Val	
		275					280					285				
Val	Thr	Gly	Val	Ser	Gly	Ser	Gly	Lys	Ser	Ser	Leu	Val	Asn	Glu	Ile	
	290					295					300					
Leu	Tyr	Lys	Ala	Leu	Ala	Gln	Lys	Ile	Asn	Lys	Ser	Lys	Val	Lys	Pro	
305					310					315					320	
Gly	Asn	Phe	Asp	Glu	Ile	Lys	Gly	Ile	Asp	Gln	Leu	Asp	Lys	Ile	Ile	
				325					330					335		
Asp	Ile	Asp	Gln	Ser	Pro	Ile	Gly	Arg	Thr	Pro	Arg	Ser	Asn	Pro	Ala	
			340					345					350			
Thr	Tyr	Thr	Gly	Val	Phe	Asp	Asp	Ile	Arg	Asp	Val	Phe	Ala	Gln	Thr	
	355					360						365				
Asn	Glu	Ala	Lys	Ile	Arg	Gly	Tyr	Gln	Lys	Gly	Arg	Phe	Ser	Phe	Asn	
	370					375					380					
Val	Lys	Gly	Gly	Arg	Cys	Glu	Ala	Cys	Lys	Gly	Asp	Gly	Ile	Ile	Lys	
385					390					395					400	
Ile	Glu	Met	His	Phe	Leu	Pro	Asp	Val	Tyr	Val	Pro	Cys	Glu	Val	Cys	
				405					410					415		
Asp	Gly	Lys	Arg	Tyr	Asn	Arg	Glu	Thr	Leu	Glu	Val	Thr	Tyr	Lys	Gly	
			420					425					430			
Lys	Asn	Ile	Ala	Asp	Val	Leu	Glu	Met	Thr	Val	Glu	Glu	Ala	Thr	His	
		435					440					445				
Phe	Phe	Glu	Asn	Ile	Pro	Lys	Ile	Lys	Arg	Lys	Leu	Gln	Thr	Leu	Val	

450 455 460
 Asp Val Gly Leu Gly Tyr Ile Thr Leu Gly Gln Gln Ala Thr Thr Leu
 465 470 475 480
 Ser Gly Gly Glu Ala Gln Arg Val Lys Leu Ala Ser Glu Leu His Lys
 485 490 495
 Arg Ser Thr Gly Arg Ser Ile Tyr Ile Leu Asp Glu Pro Thr Thr Gly
 500 505 510
 Leu His Val Asp Asp Ile Ser Arg Leu Leu Lys Val Leu Asn Arg Ile
 515 520 525
 Val Glu Asn Gly Asp Thr Val Val Ile Ile Glu His Asn Leu Asp Val
 530 535 540
 Ile Lys Thr Ala Asp His Ile Ile Asp Leu Gly Pro Glu Gly Gly Glu
 545 550 555 560
 Gly Gly Gly Thr Ile Ala Thr Gly Thr Pro Glu Glu Ile Ala Gln
 565 570 575
 Asn Lys Gly Ser Tyr Thr Gly Gln Tyr Leu Lys Pro Val Leu Glu Arg
 580 585 590
 Asp Ser Val Glu
 595

<210> 7281
 <211> 80
 <212> PRT
 <213> S.epidermidis

<400> 7281
 Leu Ile Met Glu Phe Arg Glu Gln Val Leu Asp Leu Leu Ala Glu Val
 1 5 10 15
 Ala Glu Asn Asn Ile Val Lys Glu Asn Pro Asp Val Glu Ile Phe Glu
 20 25 30
 Glu Gly Ile Ile Asp Ser Phe Gln Thr Val Gly Leu Leu Glu Ile
 35 40 45
 Gln Asn Lys Leu Asp Ile Glu Val Ser Ile Met Asp Phe Asp Arg Asp
 50 55 60
 Glu Trp Ala Thr Pro Asn Lys Ile Val Glu Ala Leu Glu Glu Leu Arg
 65 70 75 80

<210> 7282
 <211> 133
 <212> PRT
 <213> S.epidermidis

<400> 7282
 Ile Asn Gln Glu Gly Ile Leu Val Ala Val Pro Ser Glu Phe Lys Tyr
 1 5 10 15
 Ser Lys Glu His Glu Trp Val Lys Ile Glu Asn Asn Val Ala Thr Ile
 20 25 30
 Gly Ile Thr Glu Tyr Ala Gln Asn Glu Leu Gly Asp Ile Val Phe Val
 35 40 45
 Glu Leu Pro Glu Thr Asp Asp Glu Leu Asn Glu Gly Asp Thr Phe Gly
 50 55 60
 Ser Val Glu Ser Val Lys Thr Val Ser Glu Leu Tyr Ala Pro Ile Ser
 65 70 75 80
 Gly Lys Ile Val Glu Val Asn Glu Glu Leu Glu Asp Ser Pro Glu Phe
 85 90 95
 Val Asn Glu Ser Pro Tyr Glu Lys Ala Trp Met Val Lys Ile Glu Ile

100 105 110
 Ser Asp Asp Ser Gln Leu Glu Glu Leu Leu Ser Ala Asp Gln Tyr Ser
 115 120 125
 Glu Met Ile Gly Glu
 130

<210> 7283
 <211> 111
 <212> PRT
 <213> S.epidermidis

<400> 7283
 Phe Phe Lys Glu Asp Thr Ser Leu Ala Lys Val Tyr Gly Ser Leu Ile
 1 5 10 15
 Asp Asn Glu Thr Arg Cys Thr His Tyr Tyr Ser Ser Leu Asp Val Ile
 20 25 30
 Ala Ile Lys Phe Lys Cys Cys Asn Lys Tyr Tyr Pro Cys Tyr Lys Cys
 35 40 45
 His Asn Glu His Val Ser His Thr Ile Glu Arg Trp Ala Glu Asn Glu
 50 55 60
 Phe Asp Glu Lys Ala Ile Met Cys Gly Val Cys Lys His Glu Met Arg
 65 70 75 80
 Ile Arg Asp Tyr Met Met Val Glu Met Cys Pro Arg Cys Lys Ala His
 85 90 95
 Phe Asn Ser Arg Cys Lys Phe His Tyr His Leu Tyr Phe Glu Val
 100 105 110

<210> 7284
 <211> 316
 <212> PRT
 <213> S.epidermidis

<400> 7284
 Thr Lys Lys Glu Arg Phe Asn Val Lys Lys Ile Leu Ala Leu Ala Ile
 1 5 10 15
 Ala Phe Leu Ile Ile Leu Ala Ala Cys Gly Asn His Ser Asn His Glu
 20 25 30
 His His Ser His Glu Gly Lys Leu Lys Val Val Thr Thr Asn Ser Ile
 35 40 45
 Leu Tyr Asp Met Val Lys Arg Val Gly Gly Asn Lys Val Asp Val His
 50 55 60
 Ser Ile Val Pro Val Gly Gln Asp Pro His Glu Tyr Glu Val Lys Pro
 65 70 75 80
 Lys Asp Ile Lys Ala Leu Thr Asp Ala Asp Val Val Phe Tyr Asn Gly
 85 90 95
 Leu Asn Leu Glu Thr Gly Asn Gly Trp Phe Glu Lys Ala Leu Asp Gln
 100 105 110
 Ala Gly Lys Ser Thr Lys Asp Lys Asn Val Ile Ala Ala Ser Asn Asn
 115 120 125
 Val Lys Pro Ile Tyr Leu Asn Gly Glu Glu Gly Asn Lys Asn Lys Gln
 130 135 140
 Asp Pro His Ala Trp Leu Ser Leu Glu Asn Gly Ile Lys Tyr Val Lys
 145 150 155 160
 Thr Ile Gln Lys Ser Leu Glu His His Asp Lys Lys Asp Lys Ser Thr
 165 170 175
 Tyr Glu Lys Gln Gly Asn Ala Tyr Ile Ser Lys Leu Glu Glu Leu Asn

Phe Lys Asn Val Thr Lys Arg Tyr Ala Asn Asn Ile Ala Val Asp Asn
 20 25 30
 Val Ser Phe Asn Ile Lys Glu Gly Glu Phe Phe Val Leu Ile Gly Pro
 35 40 45
 Ser Gly Cys Gly Lys Thr Thr Thr Leu Lys Met Ile Asn Arg Leu Ile
 50 55 60
 Pro Leu Ser Glu Gly Tyr Ile Tyr Phe Lys Asp Lys Pro Ile Ser Asp
 65 70 75 80
 Tyr Pro Val Tyr Glu Met Arg Trp Asp Ile Gly Tyr Val Leu Gln Gln
 85 90 95
 Ile Ala Leu Phe Pro His Met Thr Ile Lys Glu Asn Ile Ala Gln Val
 100 105 110
 Pro Gln Met Lys Lys Trp Lys Asp Asn Asp Ile Asp Leu Arg Val Asp
 115 120 125
 Glu Leu Leu Thr Met Val Gly Leu Asn Pro Glu Gln Phe Lys Asn Arg
 130 135 140
 Lys Pro Asp Glu Leu Ser Gly Gly Gln Arg Gln Arg Val Gly Val Val
 145 150 155 160
 Arg Ala Leu Ala Ala Asp Pro Pro Val Ile Ile Met Asp Glu Pro Phe
 165 170 175
 Ser Ala Leu Asp Pro Ile Ser Arg Glu Lys Leu Gln Asp Asp Leu Ile
 180 185 190
 His Leu Gln Thr Gln Ile Lys Lys Thr Ile Val Phe Val Thr His Asp
 195 200 205
 Ile Gln Glu Ala Met Lys Leu Gly Asp Arg Ile Cys Leu Leu Asn Glu
 210 215 220
 Gly Arg Val Glu Gln Ile Asp Thr Pro Asp Ser Phe Arg Thr Arg Pro
 225 230 235 240
 Lys Ser Asp Phe Val Lys Gln Phe Met Gly Ser His Leu Asp Thr Thr
 245 250 255
 His Asn Ile Val Asn Gln Val Lys Ile Lys Asp Leu Gly Ile Asn Arg
 260 265 270
 Ser Val Asp Asp Asn Ala Ser Val Ile His Tyr Pro Glu Val Asp Ala
 275 280 285
 Glu Leu Tyr Leu Asn Asn Ile Tyr Glu Asp Leu Ser His Tyr Asp Ala
 290 295 300
 Val Val Val Asn Asp Lys Glu Gln His Arg Arg Tyr Leu Leu Asn Arg
 305 310 315 320
 Glu Asp Val Phe Thr Tyr Leu Ser Leu Asn Lys Glu Glu Ala Thr His
 325 330 335
 Glu

<210> 7288

<211> 374

<212> PRT

<213> S.epidermidis

<400> 7288

Gly Met Ser Leu Phe Ile Ile Gly Thr Lys Phe Phe Lys Ile Ser Val
 1 5 10 15
 Asn Leu Arg Cys Asp Leu Cys Met Lys Lys Gln Leu Asp Gln Leu Thr
 20 25 30
 Ala Tyr Thr Pro Gly Leu Ser Pro Glu Ser Leu Lys Lys Gln Tyr Gly
 35 40 45
 Ile Lys Gly Glu Leu His Lys Leu Ala Ser Asn Glu Asn Val Tyr Gly

50 55 60
 Pro Ser Pro Lys Val Lys Thr Ala Ile Gln Ser His Leu Asp Glu Leu
 65 70 75 80
 Tyr Tyr Tyr Pro Glu Ser Gly Ser Pro Lys Leu Arg Glu Ala Ile Ser
 85 90 95
 Gln Gln Leu Asn Val Asp Ala Ser Arg Ile Leu Phe Gly Ala Gly Leu
 100 105 110
 Asp Glu Val Ile Leu Met Ile Ser Arg Ala Val Leu Ser Pro Gly Asp
 115 120 125
 Lys Ile Ile Thr Ser Glu Ser Thr Phe Gly Gln Tyr Tyr His Asn Ala
 130 135 140
 Ile Val Glu Ser Ala Asp Val Ile Gln Val Pro Leu Lys Asp Gly Gly
 145 150 155 160
 Phe Asp Leu Asp Gly Met Leu Gln Gln Ile Asp Asn Lys Thr Ser Leu
 165 170 175
 Ile Trp Leu Cys Asn Pro Asn Asn Pro Thr Gly Thr Tyr Phe Ser His
 180 185 190
 Asp Glu Leu Phe Asn Phe Leu Lys Arg Val Pro Ser Asp Ile Pro Val
 195 200 205
 Leu Ile Asp Glu Ala Tyr Val Glu Phe Val Thr Ala Asp Asp Phe Pro
 210 215 220
 Asp Thr Leu Lys Leu Gln Glu Asp Phe Asp Asn Ala Phe Leu Leu Arg
 225 230 235 240
 Thr Phe Ser Lys Ala Tyr Gly Leu Ala Gly Leu Arg Val Gly Tyr Val
 245 250 255
 Ile Ala Ser Glu Asp Ala Ile Glu Lys Trp Asn Ile Ile Arg Pro Pro
 260 265 270
 Phe Asn Val Thr Arg Ile Ser Glu Tyr Ala Ala Ile Ala Ala Leu Glu
 275 280 285
 Asp Gln Glu Tyr Leu Lys Glu Val Thr Gln Lys Asn Ser Phe Glu Arg
 290 295 300
 Asp Lys Phe Tyr Gln Ile Pro Gln Ser Gln His Phe Leu Pro Ser Gln
 305 310 315 320
 Ala Asn Phe Val Phe Val Lys Thr Ser Arg Ser Gln Ala Leu Tyr Asp
 325 330 335
 Ala Leu Leu Asn Val Gly Cys Ile Thr Arg Leu Phe Pro Asn Gly Val
 340 345 350
 Arg Ile Thr Ile Gly Leu Pro Glu Gln Asn Asn Lys Met Ile Glu Val
 355 360 365
 Leu Lys His Phe Glu Tyr
 370

<210> 7289

<211> 63

<212> PRT

<213> S.epidermidis

<400> 7289

Leu Lys Gln Leu Ile Ile Ser Gln Leu Ser Thr Gln Ser Ser Ser Ala
 1 5 10 15
 Ile Ile Leu Lys Asn Phe Glu Gln Arg Ile Thr Pro Leu Tyr Ser Ser
 20 25 30
 Tyr Tyr Ile Thr Ser Ser Pro Ile Ser Cys Gly Phe Ile Leu Pro Ser
 35 40 45
 Tyr Asn Ile Asn Asn Ile Phe Tyr Thr Arg Tyr Gly Gly Ile Ser
 50 55 60

<210> 7290
 <211> 319
 <212> PRT
 <213> S.epidermidis

<400> 7290

```

Leu His Lys Leu Phe Ile Glu Ser Arg Tyr Ile Phe Met Lys Gln Pro
1      5      10      15
Tyr Asn His Gly Val Leu Phe Tyr His Glu His Ser Gly Leu Lys Asp
      20      25      30
Ile His Asn Gly Ile Gly Glu Val Ala Lys Ser Leu Ser Met Cys
      35      40      45
Lys His Leu Ser Leu Gln Leu Ser Glu Asn Lys Gly Asp Ile Ile Lys
      50      55      60
Tyr Cys Lys Ser Ile Lys Asn Glu Asn Tyr Ser Ser Asp Val Asp Val
65      70      75      80
Leu Phe Ile Leu Gly Gly Asp Gly Thr Leu Asn Glu Leu Val Asn Gly
      85      90      95
Val Met Gln Tyr Gln Leu Asn Leu Pro Ile Gly Val Ile Pro Gly Gly
      100     105     110
Thr Phe Asn Asp Phe Thr Lys Thr Leu Gln Leu His Pro Asn Phe Lys
      115     120     125
Thr Ala Ser Glu Gln Leu Leu Thr Ser His Ala Glu Ser Tyr Asp Val
      130     135     140
Leu Lys Val Asn Asp Leu Tyr Val Leu Asn Phe Val Gly Leu Gly Leu
145     150     155     160
Ile Val Gln Asn Ala Glu Asn Val Gln Asp Gly Ser Lys Asp Ile Phe
      165     170     175
Gly Lys Phe Ser Tyr Ile Gly Ser Thr Val Lys Thr Leu Leu Asn Pro
      180     185     190
Val Lys Phe Asp Phe Ser Leu Thr Val Asp Gly Glu Thr Lys Glu Gly
      195     200     205
Asn Thr Ser Met Met Leu Ile Ala Asn Gly Pro Asn Ile Gly Gly Gly
      210     215     220
Gln Ile Pro Leu Thr Asp Leu Ser Pro Gln Asp Gly Arg Ala Asn Thr
225     230     235     240
Phe Val Phe Asn Asp Gln Thr Leu Asn Ile Leu Asn Asp Ile Leu Lys
      245     250     255
Lys Arg Asp Ser Met Asn Trp Asn Glu Ile Thr Gln Gly Ile Asp His
      260     265     270
Ile Ser Gly Lys His Ile Thr Leu Ser Thr Asn Pro Ser Met Lys Val
      275     280     285
Asp Ile Asp Gly Glu Ile Asn Leu Glu Thr Pro Ile Glu Ile Gln Val
      290     295     300
Leu Pro Lys Ala Ile Gln Leu Leu Thr Ala Thr Glu Gln Asn Asn
305     310     315

```

<210> 7291
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7291

```

Ser Gln Lys Leu Thr Lys Ile Gln Ile Asn Asn Tyr Glu Val Leu His
1      5      10      15

```

Leu Lys Leu Leu Asp Phe Cys Glu Asn Cys Val Lys Gly Ile Phe Ser
 20 25 30
 Leu Ile Tyr Lys Ser Ala Phe Leu Ile
 35 40

<210> 7292
 <211> 81
 <212> PRT
 <213> S.epidermidis

<400> 7292
 Val Asn Ser Cys Lys Ile Lys Phe Cys Arg Phe Ser Asp Ile Thr Ala
 1 5 10 15
 Ile Pro Pro Leu Ile His Leu Tyr Cys Asn Gly Tyr Ala Tyr Ile Phe
 20 25 30
 Gln Ser Lys Ser Ser Ile Phe Asn Gln Lys Gln Ser Phe Tyr Asp Lys
 35 40 45
 Asn Lys Asn Thr Phe Gln Ile Arg Cys Leu Lys Trp Ile Val Ser Ser
 50 55 60
 His Phe Lys Thr Tyr Ile Leu Ile Phe Arg Asn His Phe Leu Ser Ile
 65 70 75 80
 Lys

<210> 7293
 <211> 43
 <212> PRT
 <213> S.epidermidis

<400> 7293
 Leu Ile Ser Cys Ala Tyr Ile Met Ile His Tyr Lys Leu Ser Ile Ser
 1 5 10 15
 Tyr Val His Gln Ser Pro Gly Arg Phe Asn Leu Ser Ser Lys Thr Asp
 20 25 30
 Gly Gln Gly Thr Arg Leu Leu Ile Phe Tyr Leu
 35 40

<210> 7294
 <211> 374
 <212> PRT
 <213> S.epidermidis

<400> 7294
 Tyr Asn Asp Trp Lys Phe Lys Asp Gly Glu Lys Met Arg Leu Ile Ile
 1 5 10 15
 Lys Lys Ile Tyr Ile Ile Ala Ile Val Leu Leu Asn Met Val Phe Lys
 20 25 30
 Pro Phe Asn Ile Asn Ser Lys His Ile Val Ile Met Met Thr Phe Lys
 35 40 45
 Gln Asp Ile Leu Pro Ile Ile Glu Ala Leu Cys Ser Glu Gly Tyr His
 50 55 60
 Val Thr Val Ile Gly Lys Lys Ile Tyr Gln Lys Asp Ile Asn Asn Ile
 65 70 75 80
 Asn His Ala Tyr Phe Ile Pro Ala Gly Asn Lys Tyr Ile Met Arg His
 85 90 95
 Met Lys Val Leu Ser Lys Ala Lys Val Ile Ile Leu Asp Thr Tyr Tyr

100 105 110
 Leu Met Met Gly Gly Tyr Gln Lys Lys Lys Gly Gln Thr Val Ile Gln
 115 120 125
 Thr Trp His Ala Ala Gly Ala Leu Lys Asn Phe Gly Leu Thr Asp His
 130 135 140
 Gln Val Asp Leu Lys Asn Lys Ala Met Val Arg Gln Tyr Lys Lys Val
 145 150 155 160
 Tyr Asp Ala Thr Asp Tyr Tyr Leu Val Gly Gly Glu Lys Met Ala Gln
 165 170 175
 Cys Phe Ile Gln Ser Phe Asp Ala Ser Pro Ser Gln Met Leu Lys Phe
 180 185 190
 Gly Leu Pro Arg Leu Thr Gln Tyr Phe Arg Ser Asn Leu Lys Leu Glu
 195 200 205
 Gln Gln Arg Leu Lys Lys Lys Tyr His Ile Thr Asn Lys Leu Ala Val
 210 215 220
 Tyr Val Pro Thr Tyr Arg Glu Gly Gln Val Ala Gln Arg Thr Ile Asp
 225 230 235 240
 Lys Glu Asn Phe Glu Arg His Leu Pro Asn Tyr Thr Leu Leu Ser His
 245 250 255
 Leu His Pro Ser Thr Val Asp Cys Gln Thr Ser His Ser Ile Asp Val
 260 265 270
 Thr Ser Leu Leu Ile Met Ala Asp Ile Ile Ile Ser Asp Tyr Ser Ser
 275 280 285
 Leu Pro Ile Glu Ala Ser Ala Leu Asn Lys Pro Thr Leu Ile Tyr Asn
 290 295 300
 Tyr Asp Glu Gln Gln Tyr Glu Lys Val Arg Gly Leu Asn Glu Phe Tyr
 305 310 315 320
 Tyr Ala Ile Pro Glu Arg Tyr Lys Met Ser Asn Glu Glu Ser Ile Ile
 325 330 335
 Gln Ala Ile Gln Asp Asn Asp Glu Gln Phe Gln Ser Leu Phe Asn Asp
 340 345 350
 Trp His Gln Tyr Asn Ser Lys Asp Ser Leu Asn Gln Leu Val His Phe
 355 360 365
 Ile Asn Lys Leu Val Lys
 370

<210> 7295

<211> 50

<212> PRT

<213> S.epidermidis

<400> 7295

Ile Arg Ser Cys Tyr Asn Asp Ile Leu Asn Ser Ile Leu Asp Cys Leu
 1 5 10 15
 Lys Asn Met Ala Asn Pro Ile Thr Tyr Asp Leu Arg Ser Lys Asp Val
 20 25 30
 Ser His Tyr Ile Leu Ser Thr Asn Lys Lys Arg Leu Gly Gln Lys Val
 35 40 45
 Pro Gly
 50

<210> 7296

<211> 226

<212> PRT

<213> S.epidermidis

[illegible]

<211> 85

<212> PRT

<213> S.epidermidis

[illegible]

<211> 349

<212> PRT

<213> S.epidermidis

<400> 7298

Arg Phe Lys Cys Ser Tyr Cys Arg Ile Arg Lys Ile Lys Tyr His Leu
 1 5 10 15
 Ser Val Phe Glu Ile Asn Arg Gly Val His Met Asn Lys Ile Leu Val
 20 25 30
 Thr Arg Gln Ile Pro Gln His Tyr Val Glu Gln Leu Lys Lys Ile Gly
 35 40 45
 Gln Val Val Met Trp Glu His Asp Leu Thr Pro Met Ser Arg Glu Ser
 50 55 60
 Phe Leu Ala Asn Val Glu Asp Ala Thr Ala Cys Val Ile Thr Leu Ser
 65 70 75 80
 Glu His Ile Asp Glu Val Phe Leu Arg Ala Gln Gln Leu Lys Val
 85 90 95
 Ile Ala Asn Met Ala Val Gly Phe Asp Asn Ile Asp Ile Ser Leu Ala
 100 105 110
 Lys Lys His Gly Val Val Val Thr Asn Thr Pro His Val Leu Thr Glu
 115 120 125
 Thr Thr Ala Glu Leu Gly Phe Thr Leu Met Leu Thr Val Ala Arg Arg
 130 135 140
 Ile Ile Glu Ala Thr Ser Tyr Ile Gln Lys Gly Lys Trp Lys Ser Trp
 145 150 155 160
 Gly Pro Tyr Leu Leu Ser Gly Lys Asp Val Tyr Gly Ala Thr Val Gly
 165 170 175
 Ile Phe Gly Met Gly Asp Ile Gly Lys Ala Phe Ala Arg Arg Leu Gln
 180 185 190
 Gly Phe Asp Ala Arg Ile Ile Tyr His Asn Arg Lys Arg Asp Leu Asn
 195 200 205
 Ala Glu Arg Asp Leu Asn Ala Thr Tyr Val Thr Phe Lys Ser Leu Leu
 210 215 220
 Glu Gln Ser Asp Phe Ile Cys Thr Ala Pro Leu Thr Lys Glu Thr
 225 230 235 240
 Glu Asn Gln Phe Asp Ala Arg Ala Phe Asn Lys Met Lys Asn Asp Ala
 245 250 255
 Val Phe Ile Asn Ile Gly Arg Gly Ala Ile Val Asp Glu Glu Ala Leu
 260 265 270
 Leu Glu Ala Leu Lys Asn His Glu Ile Gln Ala Cys Gly Leu Asp Val
 275 280 285
 Met Arg Gln Glu Pro Ile Gln Pro Asn His Pro Ile Leu Lys Leu Pro
 290 295 300
 Asn Ala Val Val Leu Pro His Ile Gly Ser Ala Ser Gln Val Thr Arg
 305 310 315 320
 Asn Arg Met Val Gln Leu Cys Ile Asp Asn Ile Lys Ala Val Leu Asn
 325 330 335
 Asn Asp Ala Pro Ile Thr Leu Val Thr Ser Leu His Phe
 340 345

<210> 7299

<211> 57

<212> PRT

<213> S.epidermidis

<400> 7299

His Pro Lys Cys Cys Lys Leu Cys Asn Phe Asn Ile Gln Leu Leu Met
 1 5 10 15
 Tyr Val Thr Met Phe Phe Val Val Asp Ile Ile Thr Phe Phe Ile Arg
 20 25 30

Thr His Ala Lys Asp Tyr Leu Leu Val Gln Lys Ile Ala Arg His Leu
 35 40 45
 Phe Leu Phe Ser Val Thr Phe Leu Cys
 50 55

<210> 7300

<211> 367

<212> PRT

<213> S.epidermidis

<400> 7300

Phe Ser Leu Cys Asn Ser Lys Glu Val Asn Ile His Met Gly Leu Asn
 1 5 10 15
 Lys Glu Ala Ile Lys Ile Gly Phe Ala Tyr Val Gly Ile Val Val Gly
 20 25 30
 Ala Gly Phe Ser Thr Gly Gln Glu Val Met Gln Phe Phe Thr Pro Phe
 35 40 45
 Gly Leu Trp Ser Tyr Ile Gly Val Ile Ile Ser Gly Phe Ile Leu Gly
 50 55 60
 Phe Ile Gly Arg Gln Val Ala Lys Ile Gly Thr Ala Phe Glu Ala Lys
 65 70 75 80
 Asn His Glu Ser Thr Leu Gln Tyr Val Phe Gly Lys Lys Phe Ser Lys
 85 90 95
 Val Phe Asp Tyr Ile Leu Val Phe Phe Leu Phe Gly Ile Ala Val Thr
 100 105 110
 Met Ile Ala Gly Ser Gly Ser Thr Phe Glu Gln Ser Phe Gly Ile Pro
 115 120 125
 Thr Trp Leu Gly Ala Leu Ile Met Thr Val Leu Ile Tyr Leu Thr Leu
 130 135 140
 Leu Leu Asp Phe Asn Lys Ile Val Arg Ala Leu Gly Leu Val Thr Pro
 145 150 155 160
 Phe Leu Ile Ile Met Val Ile Leu Ile Ala Val Phe Tyr Leu Phe Thr
 165 170 175
 Gly Ser Ile Ser Leu Gly Glu Val Asn Ser Ala Met Pro Glu Thr Ser
 180 185 190
 Ala Trp Lys Gly Ile Phe Trp Gly Leu Val Tyr Gly Gly Leu Ala Phe
 195 200 205
 Ala Val Gly Phe Ser Thr Ile Val Ala Ile Gly Gly Asp Ala Ser Lys
 210 215 220
 Arg Arg Val Ser Gly Ala Gly Ala Met Phe Gly Gly Val Leu Tyr Ala
 225 230 235 240
 Ile Leu Leu Ala Leu Ile Asn Phe Ser Leu Gln Thr Glu Tyr Ser Lys
 245 250 255
 Ile Lys Asp Val Ala Ile Pro Thr Leu Asn Leu Ala Lys Gly Ile His
 260 265 270
 Pro Trp Leu Gly Leu Val Leu Thr Val Ile Met Leu Ala Val Met Tyr
 275 280 285
 Asn Thr Ile Leu Gly Leu Cys Tyr Ser Phe Ala Ala Arg Phe Thr Glu
 290 295 300
 Pro Tyr Ser Lys Lys Tyr His Ile Phe Ile Ile Ile Met Met Val Met
 305 310 315 320
 Ala Phe Ile Leu Ser Phe Val Gly Phe Ala Asp Leu Ile Asn Val Leu
 325 330 335
 Tyr Lys Phe Met Gly Ile Val Gly Leu Phe Ile Val Val Ala Val Leu
 340 345 350
 Ile Lys Tyr Tyr Lys Arg Lys Lys Asp Asp Glu Glu His Ile Ala

355

360

365

<210> 7301

<211> 277

<212> PRT

<213> S.epidermidis

<400> 7301

Glu Lys Ala Trp Leu Ser Leu Met Phe Ala Val Gly Thr Val Leu Lys
 1 5 10 15
 Glu His Ile Lys Asn Phe Tyr Leu Ile Gln Arg Leu Ala Gln Phe Gln
 20 25 30
 Ile Lys Ile Thr Asn His Asn Asn Tyr Leu Gly Ile Ala Trp Glu Val
 35 40 45
 Leu Asn Pro Ala Leu Gln Ile Met Val Tyr Trp Leu Val Phe Gly Leu
 50 55 60
 Gly Ile Arg Ser Asn Ala Pro Ile His Gly Ile Pro Phe Val Phe Trp
 65 70 75 80
 Leu Leu Val Gly Ile Ser Met Trp Phe Phe Ile Asn Gln Gly Val Leu
 85 90 95
 Glu Gly Thr Lys Ser Ile Ser Gln Lys Phe Asn Gln Val Ala Lys Met
 100 105 110
 Asn Phe Pro Leu Ser Ile Ile Pro Thr Tyr Ile Val Thr Ser Arg Phe
 115 120 125
 Tyr Gly His Leu Gly Leu Leu Ala Ile Ile Ile Ala Cys Met Phe
 130 135 140
 Asn Gly Ile Ile Pro Ser Ile His Ile Val Gln Leu Leu Ile Tyr Val
 145 150 155 160
 Pro Phe Ala Tyr Leu Leu Thr Ser Ser Val Ala Leu Leu Thr Ser Thr
 165 170 175
 Leu Gly Ile Leu Ile Arg Asp Thr Gln Met Ile Met Gln Ala Leu Met
 180 185 190
 Arg Ile Leu Phe Tyr Met Ser Pro Ile Leu Trp Val Pro Lys Asn His
 195 200 205
 Gly Val Ser Gly Leu Ile His Gln Ile Met Leu Phe Asn Pro Val Tyr
 210 215 220
 Phe Ile Ala Glu Ser Tyr Arg Ala Ala Ile Leu Phe His Gln Trp Tyr
 225 230 235 240
 Phe Ile Asp His Trp Lys Leu Met Leu Tyr Asn Val Ile Ile Ile Leu
 245 250 255
 Leu Phe Phe Ile Val Gly Ser Ile Leu His Arg Arg Tyr Arg Asp His
 260 265 270
 Phe Ala Asp Phe Leu
 275

<210> 7302

<211> 43

<212> PRT

<213> S.epidermidis

<400> 7302

Tyr Cys Lys Cys Lys Glu Val Arg Phe Cys Pro Arg Trp Asp Leu Lys
 1 5 10 15
 Ser Gln Ser Leu Val Met Ile Ala Ser Gln Val Pro Leu Leu Gln Arg
 20 25 30
 Tyr Lys Glu Glu Gly Ser Ser Glu Arg Leu Asn

35

40

<210> 7303

<211> 201

<212> PRT

<213> S.epidermidis

<400> 7303

Val	Lys	Arg	Cys	Leu	Gln	Leu	Val	Lys	Thr	Leu	Tyr	Leu	Met	Arg	His
1				5					10					15	
Gly	Gln	Thr	Val	Phe	Asn	Leu	Lys	Gly	Lys	Ile	Gln	Gly	Ala	Ser	Asp
			20					25					30		
Ser	Pro	Leu	Thr	Ala	Leu	Gly	Val	Gln	Gln	Ala	Asn	Ala	Ala	Gln	Gln
		35					40					45			
Tyr	Phe	Lys	Thr	Lys	Asn	Ile	His	Phe	Asp	Tyr	Leu	Tyr	Ser	Ser	Pro
	50					55					60				
Gln	Gln	Arg	Ala	Cys	Asp	Thr	Leu	Glu	Asn	Ala	Val	Pro	Asn	Gln	Gln
65					70				75					80	
Tyr	Trp	Cys	Val	Lys	Asp	Leu	Lys	Glu	Trp	Gly	Phe	Gly	Leu	Phe	Glu
			85					90						95	
Gly	Glu	Ser	Ile	Glu	Leu	Leu	Arg	Ala	Ile	Lys	Gln	Pro	Arg	Tyr	Leu
			100					105					110		
Tyr	Gly	Asp	Ala	Val	Val	Pro	Phe	Gly	Gly	Glu	Ser	Arg	Ser	Glu	Val
		115					120					125			
Glu	His	Arg	Val	Tyr	Arg	Ala	Leu	Tyr	Glu	Met	Met	Asp	Thr	Thr	Asp
	130					135					140				
Gly	Glu	Thr	Ile	Leu	Ala	Val	Ser	His	Gly	Ser	Thr	Ile	Gly	Leu	Phe
145					150					155					160
Val	Arg	Asn	Ile	Leu	Gly	Tyr	Asp	Lys	Gly	Ser	Lys	Phe	Glu	Ile	Gly
			165						170					175	
Asn	Cys	Asn	Ile	Val	Lys	Phe	Glu	Tyr	Asp	Gly	Glu	Glu	Phe	Ile	Phe
			180					185					190		
Lys	Asp	Leu	Ile	Asn	Pro	Ile	Lys	Lys							
		195					200								

<210> 7304

<211> 137

<212> PRT

<213> S.epidermidis

<400> 7304

Gly	Glu	Phe	Arg	Ile	Met	Lys	Arg	Val	Ile	Thr	Tyr	Gly	Thr	Tyr	Asp
1				5					10					15	
Leu	Leu	His	Tyr	Gly	His	Ile	Glu	Leu	Leu	Arg	Arg	Ala	Arg	Glu	Met
			20					25					30		
Gly	Asp	Tyr	Leu	Ile	Val	Ala	Leu	Ser	Thr	Asp	Glu	Phe	Asn	Gln	Ile
		35					40					45			
Lys	Asn	Lys	Lys	Ser	Tyr	Tyr	Asp	Tyr	Glu	Gln	Arg	Lys	Met	Met	Leu
	50					55				60					
Glu	Ser	Ile	Arg	Tyr	Val	Asp	Leu	Val	Ile	Pro	Glu	Glu	Gly	Trp	Gly
65					70				75					80	
Gln	Lys	Glu	Lys	Asp	Val	Asp	Arg	Phe	Asp	Val	Asp	Val	Phe	Val	Met
			85					90					95		
Gly	His	Asp	Trp	Glu	Gly	Glu	Phe	Asp	Phe	Leu	Lys	Asp	Lys	Cys	Glu
			100					105					110		
Val	Ile	Tyr	Leu	Asn	Arg	Thr	Glu	Gly	Ile	Ser	Thr	Thr	Lys	Ile	Lys

115 120 125
 Gln Glu Leu Tyr Gly Lys Asp Thr Lys
 130 135

<210> 7305
 <211> 270
 <212> PRT
 <213> S.epidermidis

<400> 7305
 Val Cys Leu Arg Lys Lys Ile Ile Trp Leu Lys Tyr Asp Arg Ser Asp
 1 5 10 15
 Tyr Leu Ser Ile Leu Glu Val Arg Gln Leu Ser Lys Val Tyr Gly Asp
 20 25 30
 Lys Gln Ala Phe Gln Glu Val Leu Lys Glu Ile Asn Leu Asp Val Asp
 35 40 45
 Glu Gly Glu Phe Ile Ser Ile Met Gly Pro Ser Gly Ser Gly Lys Thr
 50 55 60
 Thr Leu Leu Asn Val Leu Ser Ser Ile Asp Tyr Met Thr Lys Gly Ser
 65 70 75 80
 Ile Thr Ile Asn Gly Lys Gln Leu Glu Lys Leu Ser Asn Lys Gln Leu
 85 90 95
 Ser Asp Ile Arg Lys Lys Asp Ile Gly Phe Ile Phe Gln Asp Tyr Asn
 100 105 110
 Ile Leu Asn Thr Leu Thr Val Lys Glu Asn Ile Met Leu Pro Leu Ser
 115 120 125
 Val Gln Lys Leu Asp Lys Gln Ile Met His Glu Arg Tyr Gln Arg Ile
 130 135 140
 Val Glu Ala Leu Asn Ile Ser Asp Ile Ser Asp Lys Tyr Pro Ser Glu
 145 150 155 160
 Leu Ser Gly Gly Gln Arg Gln Arg Thr Ser Ala Ala Arg Ala Phe Ile
 165 170 175
 Asn Leu Pro Ser Ile Ile Phe Ala Asp Glu Pro Thr Gly Ala Leu Asp
 180 185 190
 Ser Lys Ser Thr Leu Asp Leu Leu Lys Arg Leu Lys Tyr Met Asn Glu
 195 200 205
 Glu Phe Asn Thr Thr Ile Leu Met Val Thr His Asp Pro Val Ala Ala
 210 215 220
 Ser Phe Ser Asn Arg Val Val Met Leu Lys Asp Gly Gln Ile Phe Thr
 225 230 235 240
 Glu Leu Tyr Gln Gly Asp Asp Asp Lys Gln Thr Phe Tyr Lys Glu Ile
 245 250 255
 Ile Arg Thr Gln Ser Val Leu Gly Gly Ile Asn Tyr Glu Leu
 260 265 270

<210> 7306
 <211> 226
 <212> PRT
 <213> S.epidermidis

<400> 7306
 Lys Arg Ile Arg Ala Leu Gln Gln Asp Ile Asn Asn Tyr Met Ile Pro
 1 5 10 15
 Glu Phe Lys Lys Tyr Lys Asn Ser Thr Gln His Leu Thr Ala Asp Thr
 20 25 30
 Asn Glu Val Lys His Leu Lys Glu Asp Tyr Leu Lys Thr Val Glu Asn

50		55		60
Thr Ser Phe Ala Tyr Lys Val Leu Pro Asp Leu Phe Tyr Pro Glu Tyr				
65		70		75
Ile Ser Val Gly Lys Asn Thr Val Ile Gly Tyr Asn Thr Thr Ile Leu				80
	85		90	
Thr His Glu Val Leu Val Asp Glu Trp Arg Val Gly Lys Val Ile Ile				95
	100		105	
Gly Asp Tyr Thr Leu Ile Gly Ala Asn Thr Thr Ile Leu Pro Gly Ile				110
	115		120	
Thr Ile Gly Asn His Val Lys Ile Gly Ala Gly Thr Val Val Ser Lys				125
	130		135	
Asp Val Pro Asp Tyr Ser Phe Ala Phe Gly Asn Pro Met Gln Ile Gln				140
145		150		155
Leu Asp Ser Gly Gly Asp Asn Glu Trp His Lys Lys Lys Ile Thr Ser				160
	165		170	
				175
Phe Gln				

<210> 7309

<211> 203

<212> PRT

<213> S.epidermidis

<400> 7309

Ile Ile Tyr Arg Val Leu Ile His Glu Phe Gly His Val Leu Phe Asn		
1	5	10
Lys Leu Ala Gly Gly Lys Ala Lys Asp Leu Val Ile Val Thr Ser Pro		
	20	25
Arg Glu Arg Lys Val Thr Ser Gln Gly Tyr Ala Ile Thr Gln Ser		
	35	40
Lys Gly Tyr Leu Gly Gln Phe Ile Thr Thr Ile Gly Gly Tyr Leu Met		
	50	55
Pro Pro Leu Met Phe Leu Thr Gly Leu Val Ser Ile His Tyr Gln Tyr		
65	70	75
Pro Ser Ile Phe Ile Thr Ile Tyr Leu Phe Ile Phe Ile Tyr Tyr Phe		
	85	90
Phe Ile Thr Ser Arg Lys Leu Ser Pro Leu Ile Val Ile Ile Leu Ile		
	100	105
Ser Ser Leu Leu Tyr Leu Val Phe Lys Gln Asp His Gln Trp Phe Ile		
	115	120
Tyr Asp Ile Val Thr Leu Ser Tyr His Phe Ile Leu Gly Val Leu Leu		
	130	135
Gly Glu Ile Leu Gln Ser Ser Trp Thr Ile Phe Arg Leu Thr Phe Gln		
145	150	155
Arg Pro Lys Pro Ser Trp Asp Gly Ser Ala Leu Thr Lys Val Thr Arg		
	165	170
Val Pro Thr Phe Ile Phe Ser Leu Val Trp Ile Leu Phe Asn Leu Tyr		
	180	185
Thr Val Tyr Leu Leu Ile Lys Tyr Thr Ile Leu		
	195	200

<210> 7310

<211> 412

<212> PRT

<213> S.epidermidis

<400> 7310

Glu	Asn	Cys	Arg	Gly	Cys	Lys	Arg	Met	Ile	Pro	Tyr	Gly	Thr	Phe	Thr		
1				5					10					15			
Phe	Phe	Leu	Ile	Ala	Phe	Ile	Val	Leu	Ile	Pro	Val	Ile	Ile	Leu	Gly		
		20						25					30				
Phe	Leu	Gly	Lys	Arg	Ser	Tyr	Ile	Tyr	Asn	Gly	Ile	Ser	Thr	Ala	Ile		
	35						40					45					
Met	Ile	Val	Ile	Ile	Phe	Ala	Ser	Asp	Lys	His	Asn	Leu	Leu	Gly	Gln		
	50					55					60						
Lys	Tyr	Leu	Ser	Ala	Gln	Leu	Phe	Cys	Phe	Ile	Ile	Tyr	Val	Ile	Trp		
65					70					75					80		
Gln	Val	Ala	Leu	Ile	Met	Tyr	Tyr	Tyr	Gln	Ser	Arg	Gln	Lys	Lys	Asn		
				85					90					95			
Thr	Phe	Thr	Lys	Phe	Val	Thr	Ile	Met	Val	Leu	Ser	Ile	Leu	Pro	Leu		
			100					105					110				
Ala	Ile	Val	Lys	Ile	Leu	Gln	Ser	Ser	Trp	Leu	Gly	Gly	His	Gln	Ile		
		115					120					125					
His	Phe	His	Glu	Ser	Lys	Leu	Ile	Glu	Phe	Val	Gly	Phe	Leu	Gly	Ile		
	130					135					140						
Ser	Tyr	Val	Thr	Phe	Lys	Ser	Val	Gln	Leu	Ile	Met	Glu	Ile	Arg	Asp		
145					150					155				160			
Gly	Ser	Ile	Lys	Glu	Ile	Lys	Val	Gly	Lys	Leu	Ile	Gln	Phe	Ile	Ser		
			165					170						175			
Phe	Phe	Pro	Thr	Ile	Ser	Ser	Gly	Pro	Ile	Asp	Arg	Tyr	Lys	Arg	Phe		
		180					185						190				
Val	Lys	Asp	Asp	Lys	Lys	Val	Pro	Ser	Gly	Ala	Glu	Tyr	Arg	Glu	Leu		
	195					200						205					
Val	Val	Lys	Ala	Ile	His	Met	Ile	Met	Leu	Gly	Phe	Leu	Tyr	Lys	Tyr		
	210					215					220						
Ile	Ile	Ala	Tyr	Leu	Ile	Gln	Thr	Tyr	Ala	Val	Asn	Pro	Leu	Gln	Leu		
225					230					235					240		
Asn	Leu	His	Gly	Phe	Thr	His	Met	Trp	Leu	Tyr	Met	Tyr	Ala	Tyr	Ser		
			245					250						255			
Leu	Tyr	Leu	Phe	Phe	Asp	Phe	Ala	Gly	Tyr	Ser	Leu	Phe	Ala	Ile	Ala		
		260					265						270				
Val	Ser	Tyr	Leu	Tyr	Gly	Ile	Lys	Thr	Pro	Pro	Asn	Phe	Lys	Gln	Pro		
	275					280						285					
Phe	Lys	Ala	Lys	Asn	Ile	Lys	Asp	Phe	Trp	Asn	Arg	Trp	His	Met	Thr		
	290				295					300							
Leu	Ser	Phe	Trp	Phe	Arg	Asp	Cys	Ile	Tyr	Met	Arg	Ser	Leu	Phe	Tyr		
305					310					315					320		
Met	Ser	Arg	Lys	Lys	Leu	Leu	Lys	Ser	Gln	Phe	Ala	Met	Ser	Asn	Val		
			325					330						335			
Ala	Tyr	Phe	Leu	Asn	Phe	Phe	Ile	Met	Gly	Val	Trp	His	Gly	Leu	Glu		
		340						345					350				
Val	Tyr	Tyr	Ile	Val	Tyr	Gly	Leu	Tyr	His	Ala	Ala	Leu	Phe	Ile	Gly		
	355					360						365					
Tyr	Gly	Tyr	Tyr	Glu	Arg	Trp	Arg	Lys	Lys	His	Pro	Pro	Arg	Trp	Gln		
	370				375						380						
Asn	Gly	Phe	Thr	Thr	Ala	Ile	Ser	Ile	Ile	Ile	Thr	Phe	His	Phe	Val		
385					390					395					400		
Thr	Phe	Gly	Phe	Leu	Ile	Phe	Ser	Gly	Lys	Phe	Ile						
			405					410									

<210> 7311

<211> 155

<212> PRT

<213> S.epidermidis

<400> 7311

```

Val Phe Ile Arg Tyr Leu Ile Thr Lys Ile Gly Gly Gly Lys Met Lys
1           5           10           15
Glu Asn Asp Val Val Leu Lys Ser Val Thr Lys Ile Val Val Phe Ile
          20           25           30
Leu Leu Thr Phe Gly Phe Tyr Val Phe Phe Ala Gly His Asn Asn Pro
          35           40           45
Gly Gly Gly Phe Ile Gly Gly Leu Ile Phe Ser Ser Ala Phe Ile Leu
          50           55           60
Met Phe Leu Ala Phe Asp Val Asn Glu Val Leu Lys Ser Leu Pro Ile
65           70           75           80
Asp Phe Lys Lys Leu Met Ile Ile Gly Ser Leu Ile Ser Val Ala Thr
          85           90           95
Ala Ser Val Pro Met Phe Phe Gly Lys Pro Phe Leu Tyr Gln Thr Glu
          100          105          110
Ala Asn Val Thr Phe Pro Leu Leu Gly His Val His Val Thr Thr Val
          115          120          125
Thr Leu Phe Glu Leu Gly Ile Leu Leu Thr Val Val Gly Val Ile Val
          130          135          140
Thr Val Met Leu Ser Ile Ser Gly Gly Arg Ser
145          150          155

```

<210> 7312

<211> 55

<212> PRT

<213> S.epidermidis

<400> 7312

```

Met Arg Ile Arg His Cys Leu Asp Tyr Val Val Val Asn Phe Leu Leu
1           5           10           15
Arg Phe Leu Asn Val Cys Asn Leu Ile Val Ile Lys Ile His Ser Ser
          20           25           30
Ile Tyr Lys Tyr Ile Val Leu Cys Leu Lys Tyr Gln Val Lys Ala Arg
          35           40           45
Tyr Thr Gly Lys Leu Ser Thr
          50           55

```

<210> 7313

<211> 344

<212> PRT

<213> S.epidermidis

<400> 7313

```

Ile Val Gln Arg Met Glu Ala Ser Arg Phe Thr Leu Phe Lys Tyr Cys
1           5           10           15
Phe Val Asn Ile Val Ile Lys Lys Val Leu Lys Glu Arg Val Met Asn
          20           25           30
Lys Tyr Arg Ser Val Ile Ile Trp Leu Phe Ile Leu Ile Leu Ser Met
          35           40           45
Ser Leu Ser Leu Ser Trp Asp Val Gly Lys Leu Asp Asp Val Phe Asn
          50           55           60
Gln Thr Ile Leu Phe Gln Val Arg Leu Pro Arg Leu Leu Glu Ala Met
65           70           75           80

```

Leu Thr Gly Ala Val Leu Thr Leu Ala Gly Gln Val Tyr Gln Ile Val
 85 90 95
 Leu Asn Asn Pro Leu Ala Asp Ser Phe Thr Leu Gly Leu Ala Ser Gly
 100 105 110
 Ala Ser Leu Gly Ser Gly Ile Ala Leu Phe Leu Gly Leu Ser Phe Leu
 115 120 125
 Trp Phe Pro Ile Phe Ser Ile Ile Phe Ser Leu Ile Thr Leu Leu Leu
 130 135 140
 Val Leu Ser Val Ser Ala Met Leu Ala Lys Gly Tyr Pro Val Gln Met
 145 150 155 160
 Leu Ile Leu Thr Gly Leu Leu Phe Gly Ala Leu Leu Asn Ala Leu Leu
 165 170 175
 Tyr Leu Leu Val Leu Ile Asn Pro Lys Lys Met Asn Pro Ile Ala Ser
 180 185 190
 Tyr Leu Phe Gly Gly Phe Ala Ser Ala Glu Tyr Gln Asp Val Met Ile
 195 200 205
 Ile Ser Leu Ile Ala Ser Val Ala Ile Ile Val Leu Phe Leu Met Gln
 210 215 220
 Lys Gly Ile Lys Leu Leu Gln Val Gly Glu Leu Lys Ser Gln Ser Leu
 225 230 235 240
 Gly Leu Asn Val Gln Gln Val Thr Tyr Ile Val Leu Ile Val Ala Ser
 245 250 255
 Ile Met Thr Ala Val Val Val Ala Tyr Val Gly Val Ile Gly Phe Ile
 260 265 270
 Gly Met Ile Ile Pro Gln Leu Ile Arg Lys Phe Tyr Trp Arg Tyr Gln
 275 280 285
 Ile Gly Leu Gln Met Leu Leu Asn Ile Ile Ile Gly Ala Val Val Met
 290 295 300
 Ile Ile Ala Asp Phe Ile Gly Ser Thr Met Ile Gln Pro Ile Gln Ile
 305 310 315 320
 Pro Val Gly Ile Val Met Ala Leu Leu Gly Val Pro Val Leu Phe Tyr
 325 330 335
 Ile Leu Ile Lys Gln Thr Asn Ile
 340

<210> 7314

<211> 165

<212> PRT

<213> S.epidermidis

<400> 7314

Asn Leu Lys Arg Met Ile Lys Tyr Ile Tyr Trp Trp Val Ser Ile Lys
 1 5 10 15
 Tyr Ile Gln Phe Glu Glu Val Ile Met Met Ala Val Gln Tyr Glu Thr
 20 25 30
 Lys Ala Thr Asn Val Gly Gly Arg Lys Gly His Val His Thr Asp Asp
 35 40 45
 Asn Ala Ile Asn Val Asp Val Leu Pro Pro Gln Gln Ala Asp Gly Lys
 50 55 60
 Ala Thr Asn Pro Glu Gln Leu Phe Ala Ala Gly Tyr Ala Ser Cys Phe
 65 70 75 80
 Asn Gly Ala Phe Asp Leu Ile Leu Lys Gln Asn Lys Val Arg Asp Ala
 85 90 95
 Glu Pro Glu Val Thr Leu Thr Val Arg Leu Glu Asp Asp Pro Asp Ala
 100 105 110
 Glu Ser Pro Lys Leu Ser Val Asp Ile His Ala Lys Val Lys Asn Val

115	120	125
Leu Ser Gln Glu Asp Ala Glu Lys Tyr Leu Gln Asp Ala His Asp Phe		
130	135	140
Cys Pro Tyr Ser Lys Ala Thr Arg Gly Asn Ile Asp Val Asn Leu Asn		
145	150	155
Val Glu Val Val Glu		
165		

<210> 7315
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7315
Asn Leu Val Arg Phe Ala Ala Val Asn Ala Val Ser Leu Pro Glu Lys
1 5 10 15
Lys Asn Glu Thr Asn Ile Asn Ser Ile Ile Ala Ile Ile Met Met His
20 25 30
Phe Ser Leu Arg Phe Ser Ser Tyr
35 40

<210> 7316
 <211> 557
 <212> PRT
 <213> S.epidermidis

<400> 7316
Gly Asp Lys Arg Met Asn Ile Ile Asp Gln Val Lys Gln Thr Leu Ile
1 5 10 15
Glu Glu Ile Glu Ala Ser Ile Arg Lys Ala Asn Leu Ala Glu Asp Ile
20 25 30
Pro Glu Ile Lys Ile Glu Ile Pro Lys Asp Thr Lys Asn Gly Asp Tyr
35 40 45
Ser Ser Asn Ile Ala Met Val Leu Thr Lys Ile Ala Lys Arg Asn Pro
50 55 60
Arg Glu Ile Ala Gln Ala Ile Val Asp His Leu Asp Thr Ser Lys Ala
65 70 75 80
His Val Lys Gln Val Asp Ile Ala Gly Pro Gly Phe Ile Asn Phe Tyr
85 90 95
Leu Asp Asn Gln Tyr Leu Thr Asp Ile Ile Pro Glu Ala Ile Thr Lys
100 105 110
Gly Asp Arg Phe Gly Tyr Ala Thr Gln Ser Lys Asn Thr Asn Ile Leu
115 120 125
Leu Glu Tyr Val Ser Ala Asn Pro Thr Gly Asp Leu His Ile Gly His
130 135 140
Ala Arg Asn Ala Ala Val Gly Asp Ser Leu Ala Asn Ile Leu Ile Ala
145 150 155 160
Ala Gly Tyr Asn Val Thr Arg Glu Tyr Tyr Ile Asn Asp Ala Gly Asn
165 170 175
Gln Ile Thr Asn Leu Ala Arg Ser Ile Glu Ala Arg Tyr Phe Glu Ala
180 185 190
Leu Gly Asp Thr Ser Tyr Glu Met Pro Ala Asp Gly Tyr Asn Gly Lys
195 200 205
Asp Ile Ile Glu Ile Gly Lys Asp Leu Ala Val Lys His Pro Glu Ile
210 215 220
Lys Asp Tyr Ser Asp Glu Glu Arg Leu Lys Thr Phe Arg Gln Leu Gly

225					230					235				240
Val	Asp	Tyr	Glu	Met	Glu	Lys	Leu	Lys	Lys	Asp	Leu	Ser	Asp	Phe
				245					250					255
Val	His	Phe	Asp	Asn	Trp	Phe	Ser	Glu	Thr	Ser	Leu	Tyr	Glu	Asn
			260					265					270	
Ala	Ile	Lys	Asn	Thr	Leu	Ser	Lys	Met	Lys	Glu	Leu	Gly	Tyr	Thr
		275					280					285		
Glu	Ala	Asp	Gly	Ala	Thr	Trp	Leu	Arg	Thr	Ser	Asp	Phe	Lys	Asp
	290					295				300				
Lys	Asp	Arg	Val	Leu	Ile	Lys	Lys	Asp	Gly	Asn	Tyr	Thr	Tyr	Phe
305					310					315				320
Pro	Asp	Thr	Ala	Tyr	His	Tyr	Asn	Lys	Ile	Asn	Arg	Gly	Asn	Asp
			325						330				335	
Leu	Ile	Asp	Leu	Met	Gly	Ala	Asp	His	His	Gly	Tyr	Ile	Asn	Arg
		340						345					350	
Lys	Ala	Ser	Leu	Glu	Thr	Phe	Gly	Val	Asp	Ser	Asp	Arg	Leu	Glu
	355						360					365		
Gln	Ile	Met	Gln	Met	Val	Arg	Leu	Met	Gln	Asn	Gly	Glu	Glu	Val
	370					375				380				Lys
Met	Ser	Lys	Arg	Thr	Gly	Asn	Ala	Ile	Thr	Leu	Arg	Glu	Ile	Met
385					390					395				400
Glu	Val	Gly	Ile	Asp	Ala	Ala	Arg	Tyr	Phe	Leu	Thr	Met	Arg	Ser
			405						410				415	
Asp	Ser	His	Phe	Asp	Phe	Asp	Leu	Glu	Leu	Ala	Lys	Glu	Gln	Ser
		420					425					430		
Asp	Asn	Pro	Ile	Tyr	Tyr	Ala	Gln	Tyr	Ala	His	Ala	Arg	Ile	Cys
	435					440					445			Ser
Ile	Leu	Lys	Gln	Ala	Lys	Glu	Gln	Gly	Ile	Glu	Val	Ser	Thr	Asp
	450					455					460			Ala
Asp	Phe	Ser	Lys	Ile	Asn	Asn	Asp	Lys	Ala	Ile	Asp	Leu	Leu	Lys
465					470					475				480
Val	Ala	Glu	Phe	Glu	Ser	Thr	Ile	Glu	Ser	Ala	Ala	Glu	His	Arg
			485						490				495	
Pro	His	Arg	Leu	Thr	Asn	Tyr	Ile	Gln	Asp	Leu	Ala	Ala	Ala	Phe
			500					505					510	His
Lys	Phe	Tyr	Asn	Ala	Glu	Lys	Val	Leu	Thr	Asp	Asp	Thr	Glu	Lys
	515						520					525		Thr
Lys	Ala	His	Val	Ala	Met	Ile	Glu	Ala	Val	Arg	Ile	Thr	Leu	His
	530					535					540			Asn
Ala	Leu	Ala	Leu	Val	Gly	Val	Thr	Ala	Pro	Glu	Ser	Met		
545					550					555				

<210> 7317

<211> 77

<212> PRT

<213> S.epidermidis

<400> 7317

Met	Lys	Phe	Arg	Glu	Trp	Thr	Ile	Thr	Ile	Asn	Gly	Lys	Gly	Pro	Ile
1				5					10					15	
Asn	Val	Val	Ala	Asn	Glu	Asp	Thr	Leu	Leu	Ile	Leu	Gln	Lys	Tyr	Gln
			20					25				30			
His	Val	Glu	Val	Ala	Leu	Lys	Ile	Asp	Asn	Glu	Thr	Val	Gln	Val	Lys
		35					40				45				
Ser	Leu	Gly	Tyr	Asn	Glu	Asp	Ile	Ile	Ile	Asn	His	Asn	Thr	Lys	Glu
	50					55					60				

Ile Thr Ile Asn Val Thr Asn Leu Leu Glu Asp Asp Glu
65 70 75

<210> 7318
<211> 91
<212> PRT
<213> S.epidermidis

<400> 7318
Leu Asn Ile Arg Phe Thr Trp Asn Lys Gly Gly Leu Met Met Ser Thr
1 5 10 15
His Ser Gln Cys Asn Tyr Val Asn Pro Asn Ser Ile Ser Leu Asp Trp
20 25 30
Glu Cys Leu Ile Ile Ser Lys Thr Asp Met Leu Leu Asp Gly Val Pro
35 40 45
Lys Glu Leu Ile Asn Thr Trp Leu Asp Gln Asn Val Ile Glu Pro Phe
50 55 60
Cys Val Arg Asn Asn Glu Ile Asn Phe Lys Thr Lys Asp Val Trp Asn
65 70 75 80
Ala Leu Lys Thr His Asn Trp Tyr Tyr Ser Asn
85 90

<210> 7319
<211> 52
<212> PRT
<213> S.epidermidis

<400> 7319
Glu Thr Pro Arg Leu Ile Ala Cys Ala Leu Pro Asn Lys Arg Thr Ser
1 5 10 15
Lys Tyr Gly Arg Ser Ile Ile Val Thr Ile Ile Asn Ile Thr Asn Asn
20 25 30
Met Pro Glu Thr Val Thr Asn Leu Glu Phe Asp Ala Ser Lys Leu Ala
35 40 45
Asn Ile Thr Phe
50

<210> 7320
<211> 569
<212> PRT
<213> S.epidermidis

<400> 7320
Gly Glu Asp Arg Ser Met Lys Ser His Ile His Phe Ser Ile Asp Arg
1 5 10 15
Asp Leu Ile Cys Ala Ile Met Val Gly Val Leu Ser Gly Ile Val Thr
20 25 30
Leu Ala Met Phe Phe Leu Ser Gly Tyr Met Ile Thr Gln Ser Ala Leu
35 40 45
Gly Ala Pro Leu Tyr Ala Leu Met Ile Leu Val Val Ser Val Lys Leu
50 55 60
Phe Gly Phe Leu Arg Ala Ile Thr Arg Tyr Ile Glu Arg Leu Leu Ser
65 70 75 80
His Lys Thr Thr Phe Thr Met Leu Arg Asn Val Arg Val Gln Phe Leu
85 90 95
Lys Met Leu Tyr Pro Val Val Pro Asp Ile Tyr Arg Arg Phe Asn Ser


```
<210> 7321
<211> 84
<212> PRT
<213> S.epidermidis
```

```
<210> 7322
<211> 93
<212> PRT
<213> S.epidermidis
```

```
<210> 7323
<211> 70
<212> PRT
<213> S.epidermidis
```

<400> 7323

Ser	Thr	Ser	Arg	Gln	Gln	Ile	Ile	Leu	Leu	Thr	Glu	Ile	Lys	Leu	Ser
1				5					10					15	
Glu	Leu	Gly	Thr	Glu	Phe	Val	Ile	Ser	Ser	Arg	Val	Thr	Arg	Phe	Ile
			20					25					30		
Lys	Glu	Ile	Pro	Arg	Arg	Asn	Val	Phe	Phe	Val	Tyr	Phe	Phe	Asp	Ser
		35					40					45			
Gln	Tyr	Ile	Lys	Cys	Leu	Gly	Thr	Met	Phe	Cys	Ile	Leu	Ser	Ile	Leu
	50					55					60				

Leu Phe Tyr Leu Ala Ser
65 70

<210> 7324
<211> 145
<212> PRT
<213> S.epidermidis

<400> 7324
Phe Tyr Gln Arg Lys Trp Thr Leu Asn Gln Leu Val Asp Tyr Phe Ser
1 5 10 15
Arg Trp Leu Asp Glu Thr Lys Gly Thr Phe Val His Thr Gln Lys Gln
20 25 30
Asp His His Tyr Ile Ile Tyr Asn Arg Asn Ile Lys Arg Pro Leu Ala
35 40 45
Ile Phe Lys Met Val Asn Thr Thr Glu Asp Ile Ile Thr Leu His Leu
50 55 60
Val Asp Gly Lys Leu Met Lys Pro Lys Ser Lys Lys Gln Ala Lys Leu
65 70 75 80
Glu Phe Arg Leu Leu Lys Gly Thr Arg Leu Ile Met Val His Leu Tyr
85 90 95
Asp Tyr Ile Pro Arg Leu Phe Trp Pro Ile Tyr Tyr Phe Ile Gln Ala
100 105 110
Pro Ile Gln Gly Leu Leu Met Arg Gly Phe Glu Ile Asp Cys Arg Ile
115 120 125
Lys His Tyr Gln Gly Arg Ile Gln Ser Gly Glu Lys Ile Lys Tyr Thr
130 135 140
Lys
145

<210> 7325
<211> 46
<212> PRT
<213> S.epidermidis

<400> 7325
Asn His Lys Ser Ile Tyr Thr Ile Leu Phe Ile Thr Leu Gly Asn Lys
1 5 10 15
Ile Val Pro Asn Glu Cys Lys Asn Ala Ile Leu Leu Glu Leu Cys Phe
20 25 30
Ser Leu Ile Ile Tyr Leu Ile Glu Tyr Tyr Arg Asn Thr Phe
35 40 45

<210> 7326
<211> 206
<212> PRT
<213> S.epidermidis

<400> 7326
Tyr Asn Lys Ser Lys Glu Leu Val Thr Val Lys Val Lys Tyr Ile Asp
1 5 10 15
Lys Arg His Trp Arg Arg Leu Val Glu Arg Glu Tyr Thr Glu Val Lys
20 25 30
Val Asn Asn Asn Arg Phe Lys Gly Ile Ile Gly Leu Val Thr Met Lys
35 40 45
Lys Val Arg Glu Pro Leu Glu Val Thr Val Val Gly Gln Asn Ile Ile

50		55		60	
Val	Ala	Asp	Asp	Asn	Tyr
65		70		75	
Arg	Tyr	Ser	Met	Thr	Val
		85		90	
Tyr	Tyr	Phe	Asp	Ile	Asn
		100		105	
Arg	Thr	Ile	Asp	Leu	Cys
		115		120	
Tyr	Glu	Leu	Val	Asp	Glu
		130		135	
Gln	Ile	Ser	Lys	Lys	Gln
145				150	
Leu	Met	Ile	Glu	Ile	Asp
		165		170	
Met	Arg	Cys	Tyr	His	Lys
		180		185	
Lys	Arg	Pro	Tyr	Lys	Ala
		195		200	

<210> 7327

<211> 159

<212> PRT

<213> S.epidermidis

<400> 7327

Phe	Cys	Lys	Arg	Ser	Thr	Ile	Met	Thr	Asp	Ser	Asn	Ala	Lys	Glu	Ile
1				5					10					15	
Arg	Thr	Gly	Arg	Leu	Ile	Ala	Ile	Ser	Ser	Leu	Val	Phe	Cys	Ile	Leu
		20						25					30		
Leu	Ile	Ile	His	His	Phe	Ile	Val	Leu	Asp	Glu	Ser	Thr	Ala	Lys	Ser
		35					40					45			
Ile	Leu	Ser	Leu	Ala	Gly	Gln	Lys	Thr	Ser	Asp	Thr	Ala	Val	Lys	Asn
		50				55					60				
Ile	Leu	Asn	Ser	Asp	Arg	Tyr	Thr	Gly	Ile	Met	Tyr	Ile	Leu	Ala	Tyr
65				70					75					80	
Leu	Ala	Gly	Thr	Val	Ala	Phe	Trp	Asn	Arg	His	Pro	Tyr	Leu	Trp	Trp
			85					90					95		
Phe	Met	Phe	Ala	Val	Tyr	Ile	Ser	Asn	Ala	Leu	Phe	Thr	Leu	Val	Asn
			100					105					110		
Leu	Tyr	Leu	Phe	Ile	Gln	Gly	Ile	Leu	Asp	Val	Lys	Asn	Val	Leu	Ala
		115				120						125			
Val	Leu	Pro	Ile	Leu	Ile	Val	Val	Ile	Gly	Ser	Ile	Ile	Leu	Ala	Ile
		130				135					140				
Tyr	Met	Leu	Val	Val	Ser	Ile	Thr	Arg	Lys	Ser	Thr	Phe	Asn	Arg	
145					150					155					

<210> 7328

<211> 43

<212> PRT

<213> S.epidermidis

<400> 7328

Leu	Asn	Lys	Ser	Thr	Ser	Cys	Gly	Lys	Arg	Lys	Met	Gln	Pro	Phe	Gln
1				5					10					15	
Ile	Pro	Cys	Ile	Thr	Leu	Ala	Ile	Lys	Thr	Lys	Phe	Asp	Asn	Ile	Tyr

	20		25		30
Ile Tyr Arg Val Phe Gln Ser Ile Thr Ala Tyr					
	35		40		

<210> 7329

<211> 683

<212> PRT

<213> S.epidermidis

<400> 7329

Arg Gly Glu Ser Val Glu Ile Phe Glu Thr Leu Leu Ile Phe Val Ala	
1	5 10 15
Leu Val Ile Val Ser Ser Phe Val His Thr Phe Ile Pro Lys Val Pro	
	20 25 30
Leu Ala Phe Ile Gln Ile Phe Leu Gly Met Ile Leu Tyr Leu Thr Pro	
	35 40 45
Ile Pro Val Glu Phe Asn Phe Asp Ser Glu Leu Phe Met Val Thr Leu	
	50 55 60
Ile Ala Pro Leu Leu Phe Val Glu Gly Val Asn Val Ser Arg Val His	
65	70 75 80
Leu Arg Lys Tyr Ile Lys Pro Val Met Met Met Ala Leu Gly Leu Val	
	85 90 95
Ile Thr Thr Val Ile Gly Val Gly Leu Phe Ile His Trp Ile Trp Pro	
	100 105 110
Glu Leu Pro Ile Gly Ala Ala Phe Ala Ile Ala Ala Ile Leu Cys Pro	
	115 120 125
Thr Asp Ala Val Ala Val Gln Ala Ile Thr Lys Gly Lys Val Leu Pro	
	130 135 140
Lys Gly Ser Met Thr Ile Leu Glu Gly Glu Ser Leu Leu Asn Asp Ala	
145	150 155 160
Ala Gly Ile Ile Ser Phe Lys Ile Ala Val Gly Val Leu Ile Thr Gly	
	165 170 175
Thr Phe Ser Ile Phe Asp Ala Ile Gln Gln Phe Leu Ile Ala Ser Ile	
	180 185 190
Gly Gly Ala Ile Val Gly Leu Ile Ile Gly Met Ala Leu Val Arg Phe	
	195 200 205
Arg Leu Thr Leu Met Arg Arg Gly Ile Glu Asn Ile Asn Met Phe Thr	
	210 215 220
Phe Ile Gln Leu Leu Thr Pro Phe Val Thr Tyr Leu Ile Ala Glu Leu	
225	230 235 240
Phe His Ala Ser Gly Ile Ile Ala Ala Val Val Ala Gly Leu Val His	
	245 250 255
Gly Phe Glu Arg Asp Arg Ile Ala Gln Thr Arg Thr Gln Leu Gln Met	
	260 265 270
Ser Tyr Asn His Thr Trp Ser Ile Leu Gly Tyr Val Leu Asn Gly Phe	
	275 280 285
Val Phe Ser Ile Leu Gly Phe Leu Val Pro Glu Val Ile Val Lys Ile	
	290 295 300
Ile Lys Thr Glu Pro His Asn Leu Leu Phe Leu Ile Val Ile Thr Leu	
305	310 315 320
Leu Val Ala Leu Ala Val Tyr Leu Phe Arg Phe Val Trp Val Tyr Val	
	325 330 335
Leu Tyr Pro Tyr Phe Tyr Leu Ser Val Ser Pro Phe Gln Lys Met Ile	
	340 345 350
Ser Lys Asn Asp Glu Asp Lys Val Thr Glu Ser Lys Pro Lys Arg Ser	
	355 360 365

```

Leu Tyr Ala Leu Ile Met Thr Leu Cys Gly Val His Gly Thr Ile Ser
 370                      375                      380
Leu Ala Ile Ala Leu Thr Leu Pro Tyr Leu Leu Ala Asn His Glu Thr
385                      390                      395                      400
Phe Ala Tyr Arg Asn Asp Leu Leu Phe Ile Ala Ser Gly Met Val Ile
                      405                      410                      415
Leu Ser Leu Ile Ile Ala Gln Val Ile Leu Pro Leu Val Thr Pro Asp
                      420                      425                      430
Ser Pro Glu Val Lys Ile Gly Asn Met Ser Phe Lys Glu Ala Arg Ile
                      435                      440                      445
Tyr Ile Leu Glu His Val Ile Asp Tyr Leu Asn Gln Lys Ser Thr Phe
                      450                      455                      460
Glu Thr Ser Tyr Arg Tyr Gly Asn Val Ile Lys Asp Tyr His Asp Lys
465                      470                      475                      480
Leu Thr Phe Leu Lys Thr Val Glu Lys Glu Asp Glu Asn Ser Lys Glu
                      485                      490                      495
Leu Glu Arg Leu Gln Lys Ile Ala Phe Asn Val Glu Thr Lys Thr Leu
                      500                      505                      510
Glu Lys Leu Val Asp Asp Gly Glu Ile Thr Glu Ser Val Leu Glu Asn
                      515                      520                      525
Tyr Met Arg Tyr Ala Glu Arg Thr Glu Val Tyr Lys Gln Ala Ser Leu
                      530                      535                      540
Leu Arg Arg Ile Ile Val Gly Leu Arg Gly Met Leu Leu Lys Arg Arg
545                      550                      555                      560
Val Lys Thr Lys Ile Asn Ser Ala Ser Ser Leu Ser Val Thr Asp Asn
                      565                      570                      575
Leu Leu Glu Leu Gly Lys Ile Asn Lys Leu Val His Tyr Asn Val Val
                      580                      585                      590
Ser Arg Leu Ala Lys Glu Ala Thr Thr Asp Asn Lys Leu Glu Val Gly
                      595                      600                      605
Met Ile Cys Asp Gly Tyr Leu Met Arg Ile Asp Asn Leu Thr Pro Asn
                      610                      615                      620
Asn Phe Phe Asn Ser Arg His Glu Asp Thr Leu Thr Lys Ile Lys Leu
625                      630                      635                      640
Asn Ala Leu Arg Glu Gln Arg Arg Ile Leu Arg Glu Leu Ile Glu Asn
                      645                      650                      655
Asp Glu Ile Thr Glu Gly Thr Ala Leu Lys Leu Arg Glu Ser Ile Asn
                      660                      665                      670
Tyr Asp Glu Met Val Ile Val Asp Ser Met Thr
                      675                      680

```

<210> 7330

<211> 162

<212> PRT

<213> S.epidermidis

<400> 7330

```

Asn Lys Arg Arg Ser Phe Ser Leu Met Asn Phe Asn Asn Leu Asp Gln
1                      5                      10                      15
Leu Tyr Arg Ser Val Ile Met Asp His Tyr Lys Asn Pro Arg Asn Lys
                      20                      25                      30
Gly Val Leu Asp Asn Gly Ser Met Thr Val Asp Met Asn Asn Pro Thr
                      35                      40                      45
Cys Gly Asp Arg Ile Arg Leu Thr Phe Asp Ile Glu Asp Gly Ile Ile
                      50                      55                      60
Asn Asp Ala Lys Phe Glu Gly Glu Gly Cys Ser Ile Ser Met Ser Ser

```

65					70					75					80
Ala	Ser	Met	Met	Thr	Glu	Ala	Val	Lys	Gly	His	Ser	Leu	Gly	Glu	Ala
				85					90					95	
Met	Gln	Met	Ser	Gln	Glu	Phe	Thr	Lys	Met	Met	Leu	Gly	Glu	Asp	Tyr
			100					105					110		
Glu	Ile	Thr	Glu	Glu	Met	Gly	Asp	Ile	Glu	Ala	Leu	Gln	Gly	Val	Ser
		115					120					125			
Gln	Phe	Pro	Ala	Arg	Ile	Lys	Cys	Ala	Thr	Leu	Ala	Trp	Lys	Ala	Leu
	130					135					140				
Glu	Lys	Gly	Thr	Val	Glu	Lys	Glu	Gly	Lys	Ser	Glu	Gly	Thr	Thr	Glu
145					150					155					160
Glu	Asp														

<210> 7331

<211> 421

<212> PRT

<213> S.epidermidis

<400> 7331

Asn	Cys	Arg	Ser	Phe	Arg	Arg	Val	Thr	Met	Lys	Leu	Lys	Pro	Phe	Leu
1				5					10					15	
Pro	Ile	Ile	Ile	Ser	Gly	Val	Ile	Phe	Ile	Ile	Phe	Leu	Phe	Leu	Pro
			20					25					30		
Ala	Ser	Trp	Phe	Thr	Gly	Leu	Val	Thr	Asn	Lys	Thr	Leu	Ala	Asp	Asn
		35					40					45			
Arg	Ile	Ser	Leu	Thr	Asp	Gln	Val	Leu	Lys	Gly	Thr	Leu	Ile	Gln	Asn
	50					55					60				
Lys	Leu	Phe	Glu	Ser	Asn	Lys	Tyr	Tyr	Pro	Ile	Tyr	Gly	Ser	Ser	Glu
65					70				75						80
Leu	Glu	Lys	Asp	Asp	Pro	Phe	Asn	Pro	Gly	Ile	Ala	Leu	Asn	Lys	Gln
				85					90					95	
Asn	Ala	Ser	Lys	Glu	Thr	Phe	Leu	Ile	Gly	Ala	Gly	Gly	Ser	Thr	Asp
			100					105					110		
Leu	Ile	Asn	Ala	Val	Glu	Leu	Ala	Ala	Gln	Tyr	Asp	Asn	Leu	Lys	Gly
		115					120					125			
Lys	Lys	Phe	Thr	Phe	Ile	Ile	Ser	Pro	Gln	Trp	Phe	Thr	Asn	His	Gly
	130					135					140				
Leu	Thr	Asn	Gln	Asn	Phe	Asp	Ala	Arg	Met	Ser	Gln	Ser	Gln	Ile	Asn
145					150				155						160
Gln	Met	Phe	Asn	Gln	Lys	Asp	Met	Pro	Ala	Asn	Leu	Lys	Lys	Arg	Tyr
			165					170						175	
Ala	Gln	Arg	Leu	Leu	Gln	Phe	Pro	His	Ala	His	Asn	Lys	Ser	Tyr	Leu
			180					185					190		
Arg	Glu	Gln	Ala	Lys	His	Pro	Asn	Asp	Val	Ser	Gly	Asn	Tyr	Ile	Ser
	195						200					205			
Ser	Phe	Lys	Glu	Asn	Gln	Leu	Thr	Lys	Ile	Glu	Ala	Ile	Lys	Ser	Leu
	210					215				220					
Phe	Ser	Phe	Thr	Lys	Pro	Pro	Leu	Ala	Glu	Val	Lys	Pro	Ala	Thr	Arg
225					230				235						240
Glu	Asp	Ala	Ser	Trp	Asp	Glu	Met	Lys	His	Lys	Ala	Ala	Asp	Ile	Gly
			245						250					255	
Lys	Ala	Asn	Thr	Gln	Ser	Asn	Lys	Tyr	Asp	Ile	Arg	Asp	Pro	Tyr	Trp
		260					265					270			
Lys	Leu	Ile	Lys	Gln	Asn	Lys	Arg	Lys	Ile	Lys	Arg	Asp	Tyr	Glu	Phe
	275						280					285			

3330

Asn Ile Asn Ser Pro Glu Phe Gln Asp Leu Lys Leu Leu Val Gln Thr
 290 295 300
 Leu His Ala Ala Gly Ala Asp Val Gln Tyr Val Ser Ile Pro Ser Asn
 305 310 315 320
 Gly Arg Trp Tyr Asp His Ile Gly Ile Lys Lys Asp Arg Arg Glu Ala
 325 330 335
 Val Tyr Lys Lys Ile His Ser Thr Val Val Asp Asn Gly Gly Lys Ile
 340 345 350
 Tyr Asp Leu Thr Asn Lys Asp Tyr Glu Lys Tyr Val Ile Ser Asp Ala
 355 360 365
 Val His Ile Gly Trp Lys Gly Trp Val Tyr Val Asp Gln Gln Ile Ala
 370 375 380
 Arg His Met Asp Gly His Ala Pro Lys Asn His Glu Val Asp Tyr Ser
 385 390 395 400
 Lys Asn Lys Pro Pro His Lys His His Asn Asp Arg Gln Asp Asp Gln
 405 410 415
 His Gln Gly Asn Lys
 420

<210> 7332
 <211> 48
 <212> PRT
 <213> S.epidermidis

<400> 7332
 Pro His Arg Arg Tyr Leu Asn Tyr Gln Asn Gln Ala Arg Ile Ile Arg
 1 5 10 15
 Lys Arg Tyr Lys Ile Thr Lys Ser Ile Tyr Asp Thr Ile Glu His Leu
 20 25 30
 Ile Leu Lys Ile Glu Ile Arg Lys Asn Cys Ser Leu Asn Gln Cys Asp
 35 40 45

<210> 7333
 <211> 103
 <212> PRT
 <213> S.epidermidis

<400> 7333
 Glu Glu Arg Arg Thr Met His Glu Gln Asp Phe Asn Ile Leu Glu Gly
 1 5 10 15
 Lys Lys Met Thr Leu Val Glu Leu Gly Arg Glu Leu Glu Asn Leu Thr
 20 25 30
 Gly Arg Thr Ile Lys Asp Thr Thr Ser Asp Ile Lys Arg Val Ile Ala
 35 40 45
 His Leu Pro Asn Phe Glu Ser Asp Thr Asp Thr Phe Val Ala Thr Tyr
 50 55 60
 His Leu Asn His Gln Asn Asp Phe Ile Asp Ala Thr Phe Val Ala Pro
 65 70 75 80
 Lys Asn Gln Ser Asp Arg Leu Lys Glu Ile Pro Val His Ile Lys Leu
 85 90 95
 Ile Ser Tyr Ile Ser Lys Asn
 100

<210> 7334
 <211> 249
 <212> PRT

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted May 1, 2014. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

<213> S.epidermidis

<400> 7334

```

Asn Ile Lys Arg Ser Leu Lys Met Asn Leu Asn Cys Ile Lys Ala Ile
1           5           10           15
Val Phe Asp Leu Glu Gly Thr Leu Leu Asp Arg Val Lys Ser Arg Glu
          20           25           30
Lys Phe Ile Glu Glu Gln Tyr Glu Arg Phe His Asp Tyr Phe Ile His
          35           40           45
Val Gln Leu Ala Asp Tyr Lys Asn Lys Phe Ile Glu Leu Asp Asp Asp
          50           55           60
Glu Asp Asn Asp Lys Pro Asp Leu Tyr Lys Glu Ile Ile Lys Gln Phe
65          70          75          80
His Ile Asp Arg Leu Lys Trp Lys Asp Leu Phe Asn Asp Phe Glu Met
          85          90          95
His Phe Tyr Arg Tyr Val Phe Pro Tyr Tyr Asp Thr Leu Tyr Thr Leu
          100         105         110
Glu Lys Leu Ser Lys His His Tyr Met Ile Gly Val Ile Ala Asn Gly
          115         120         125
Lys Ser Lys Ile Lys Gln Phe Arg Leu His Ser Leu Gly Ile Met His
          130         135         140
Val Ile Asn Tyr Leu Thr Thr Ser Glu Thr Val Gly Tyr Arg Lys Pro
145         150         155         160
His Pro Lys Ile Phe Glu Asp Met Ile Asp Gln Leu Gly Val Lys Pro
          165         170         175
Ser Glu Ile Met Tyr Val Gly Asp Asp Ala Leu Asn Asp Val Ala Pro
          180         185         190
Ala Arg Ala Met Gly Met Val Ser Val Trp Tyr Lys Gln Glu Asp Ala
          195         200         205
Glu Leu Glu Pro Leu Thr Glu Glu Val Asp Tyr Thr Ile Thr Thr Ile
210         215         220
Glu Glu Leu Leu Lys Ile Leu Pro Asp Asn Phe Glu Thr Glu Gly Glu
225         230         235         240
Glu Gln His Gly Asn Gly Phe Asn Tyr
          245

```

<210> 7335

<211> 178

<212> PRT

<213> S.epidermidis

<400> 7335

```

Phe Gly Lys Ser Cys Thr Ile Met Phe Val Asn Tyr Phe Thr Ile Ser
1           5           10           15
Lys Glu Trp Leu Tyr Met Leu Ser Val Thr Lys Lys Asn Thr Tyr Glu
          20           25           30
Ser Asn Lys Asp Glu Val Thr Gln Met Ile Asp Ser Leu Ala Glu Lys
          35           40           45
Gly Gln Glu Ala Leu Lys Glu Leu Ser Lys Lys Ser Gln His Glu Ile
          50           55           60
Asn Asp Ile Val His Gln Met Ser Met Ala Ala Val Asp Gln His Met
65          70          75          80
His Leu Ala Lys Leu Ala Tyr Asp Glu Thr Gly Arg Gly Ile Tyr Glu
          85          90          95
Asp Lys Ala Ile Lys Asn Leu Tyr Ala Ser Glu Tyr Ile Trp Asn Ser
          100         105         110

```

Ile Lys Asp Asn Lys Thr Val Gly Ile Ile Gly Glu Asp Lys Gln Lys
 115 120 125
 Gly Leu Thr Tyr Val Ala Glu Pro Ile Gly Val Ile Cys Gly Val Thr
 130 135 140
 Pro Thr Thr Asn Pro Thr Ser Thr Thr Ile Phe Lys Ala Met Ile Ala
 145 150 155 160
 Ile Lys Thr Gly Asn Pro Ile Ile Phe Ala Phe His Pro Ser Ala Gln
 165 170 175
 Gln Ser

<210> 7336

<211> 104

<212> PRT

<213> S.epidermidis

<400> 7336

Ile Lys Glu Ser Met Ile Lys Met Asn Glu Asp Asn Arg Asn Lys Gln
 1 5 10 15
 Ile Lys Phe Glu Arg Asn Leu Ile Thr Phe Pro Tyr Leu Gly Phe Ala
 20 25 30
 Phe Ile Val Leu Leu Phe Asn Ile Phe Tyr Thr Asp Val Lys Ile Thr
 35 40 45
 Met Val Leu Phe Gly Leu Phe Phe Ala Tyr Asn Leu Gly Met Leu Phe
 50 55 60
 Ile Ala Phe Ile Arg His Phe Lys Arg Thr Leu Ile Leu Thr Leu Ile
 65 70 75 80
 Leu Thr Ile Leu Ser Gly Ile Ala Phe Phe Val Leu Leu Tyr Val Phe
 85 90 95
 Gly Leu Asn His Asp Ile Phe Gly
 100

<210> 7337

<211> 154

<212> PRT

<213> S.epidermidis

<400> 7337

Asn Val Trp Arg Arg Thr Leu Met Ser Glu Gln His Asn Leu Lys Glu
 1 5 10 15
 Gln Leu Cys Phe Ser Leu Tyr Asn Ala Gln Arg Gln Val Asn Arg Tyr
 20 25 30
 Tyr Ser Asn Lys Val Phe Lys Lys Tyr Asn Leu Thr Tyr Pro Gln Phe
 35 40 45
 Leu Val Leu Thr Ile Leu Trp Asp Glu Ser Pro Val Asn Val Lys Lys
 50 55 60
 Val Val Thr Glu Leu Ala Leu Asp Thr Gly Thr Val Ser Pro Leu Leu
 65 70 75 80
 Lys Arg Met Glu Gln Val Asp Leu Ile Lys Arg Glu Arg Ser Glu Val
 85 90 95
 Asp Gln Arg Glu Val Phe Ile His Leu Thr Asp Lys Ser Glu Met Ile
 100 105 110
 Arg Pro Glu Leu Ser Asn Ala Ser Glu Lys Val Ala Thr Ala Ser Ser
 115 120 125
 Leu Ser Lys Glu Glu Val Lys Glu Leu Asn Arg Leu Leu Gly Lys Val
 130 135 140

Ile Asp Ala Phe Ile Glu Thr Lys Glu Lys
145 150

<210> 7338

<211> 101

<212> PRT

<213> S.epidermidis

<400> 7338

His Ser Arg Arg Gln Ile Leu Met Glu Asn Leu Thr Lys Glu Gln Lys
1 5 10 15
Tyr Thr Ile Ala Lys Phe Tyr Lys Leu Tyr Met Glu Arg Ser Asn Ala
20 25 30
Gly Gln Pro Glu Glu Glu Ala Asn His Phe Lys Asp Ser Val Thr Ala
35 40 45
Gln Asp Asp Tyr Phe Cys Asp Arg Lys Tyr Glu Asp Phe Ile His Asn
50 55 60
Cys Lys Val Leu Ile Asn Glu Gly Tyr Leu Asp Gly Glu Val Glu Asp
65 70 75 80
Asn Lys Ile Tyr Asn Ile Gln Val Thr Thr Lys Ala Phe Thr Glu Ile
85 90 95
Glu Arg Ser Phe Gly
100

<210> 7339

<211> 312

<212> PRT

<213> S.epidermidis

<400> 7339

Phe Tyr Arg Arg Glu Ile Met Ile Tyr Thr Val Thr Phe Asn Pro Ser
1 5 10 15
Ile Asp Tyr Ile Ile Phe Thr Asp Gly Phe Glu Ile Ser Gly Leu Asn
20 25 30
Arg Ala Lys Ala Thr Tyr Lys Phe Ala Gly Gly Lys Gly Ile Asn Val
35 40 45
Ser Arg Val Leu Lys Thr Leu Asp Val Asp Ser Thr Ala Leu Gly Phe
50 55 60
Ser Gly Gly Phe Pro Gly Asp Phe Ile Ala Gln Thr Leu Glu Asp Ser
65 70 75 80
Asn Ile Gln Ser Asp Phe Val Gln Val Asp Glu Asp Thr Arg Ile Asn
85 90 95
Val Lys Leu Lys Ser Gly Gln Glu Thr Glu Ile Asn Ala Pro Gly Pro
100 105 110
Lys Val Thr His Ala Gln Phe Glu Gln Leu Leu Ser Gln Ile Arg Arg
115 120 125
Thr Thr Asn Asp Asp Ile Val Ile Val Ala Gly Ser Val Pro Asn Ser
130 135 140
Ile Pro Ser Asp Ala Tyr Ala Gln Ile Ala Gln Ile Thr Glu Lys Thr
145 150 155 160
Gly Ala Gln Leu Val Val Asp Ala Glu Lys Asp Leu Val Glu Thr Val
165 170 175
Leu Pro Tyr Arg Pro Leu Phe Ile Lys Pro Asn Lys Asp Glu Leu Glu
180 185 190
Val Met Phe Asn Thr Thr Val Lys Ser Asp Glu Asp Val Ile Lys Tyr
195 200 205

Gly Lys Glu Ile Leu Lys Lys Gly Ala Gln Ser Val Ile Ile Ser Leu
 210 215 220
 Gly Gly Asp Gly Ala Ile Tyr Val Asp Gln His Gln Ser Ile Lys Ala
 225 230 235 240
 Val Asn Pro Gln Gly His Val Val Asn Thr Val Gly Ser Gly Asp Ser
 245 250 255
 Thr Val Ala Gly Met Val Ala Gly Leu Ser Met Gly Leu Asn Ile Asp
 260 265 270
 Glu Ala Phe Gln Gln Ala Val Ala Ser Gly Thr Ala Thr Ala Phe Ser
 275 280 285
 Glu Asp Leu Ala Thr Arg Asp Ala Ile Glu Asn Ile Lys Ser Gln Val
 290 295 300
 Thr Ile Ser Val Leu Asp Gly Glu
 305 310

<210> 7340

<211> 801

<212> PRT

<213> S.epidermidis

<400> 7340

Arg Cys Arg Arg Glu Arg Arg Gly Ile Met Asn Leu Lys Gln Ser Ile
 1 5 10 15
 Glu Glu Met Ile Lys Gln Pro Asp Tyr Glu Pro Met Ser Val Ser Asp
 20 25 30
 Phe Gln Asp Ala Leu Gly Leu Asn Ser Ala Asp Ser Phe Arg Asp Leu
 35 40 45
 Ile Lys Ile Leu Val Glu Leu Glu Gln Ser Gly Leu Ile Glu Arg Thr
 50 55 60
 Arg Thr Asp Arg Tyr Gln Arg Lys Gln Ser Asn Lys Thr Asn Ser Lys
 65 70 75 80
 Leu Ile Lys Gly Thr Leu Ser Gln Asn Lys Lys Gly Phe Ala Phe Leu
 85 90 95
 Arg Pro Glu Asp Asp Glu Met Asp Asp Ile Phe Ile Pro Pro Thr Lys
 100 105 110
 Ile Asn Arg Ala Leu Asp Gly Asp Thr Val Ile Val Glu Ile Gln Lys
 115 120 125
 Ser Arg Gly Glu His Lys Gly Lys Ile Glu Gly Glu Val Lys Ser Ile
 130 135 140
 Glu Lys His Ser Val Thr Gln Val Val Gly Thr Tyr Ser Glu Ala Lys
 145 150 155 160
 His Phe Gly Phe Val Leu Pro Asp Asp Lys Arg Ile Met Gln Asp Ile
 165 170 175
 Phe Ile Pro Lys Gly Gln Asn Leu Gly Ala Val Asp Gly His Lys Val
 180 185 190
 Leu Val Gln Ile Thr Lys Tyr Ala Asp Ser Thr Asp Asn Pro Glu Gly
 195 200 205
 His Val Ser Ala Ile Leu Gly His Lys Asn Asp Pro Gly Val Asp Ile
 210 215 220
 Leu Ser Ile Ile Tyr Gln His Gly Ile Glu Ile Glu Phe Pro Asp Asp
 225 230 235 240
 Val Leu Gln Glu Ala Glu Glu Val Pro Asp Val Ile Glu Pro Ser Glu
 245 250 255
 Ile Glu Gly Arg Arg Asp Leu Arg Asp Glu Leu Thr Ile Thr Ile Asp
 260 265 270
 Gly Ala Asp Ala Lys Asp Leu Asp Asp Ala Ile Ala Val Lys Lys Leu

Gln Glu Tyr Glu Glu Met Met Thr Asp Pro Asp Phe Trp Asn Asp Gln
 20 25 30
 Thr Lys Ala Gln Asp Ile Ile Asp Lys Asn Asn Ala Leu Lys Ser Ile
 35 40 45
 Val Asn Gly Tyr Tyr Gln Leu Thr Asn Ala Val Asp Asp Met Ser Ala
 50 55 60
 Thr Arg Glu Leu Leu Gln Glu Glu Tyr Asp Glu Asp Met Lys Ile Glu
 65 70 75 80
 Leu Glu Glu Glu Val Gln Gln Phe Glu Glu Gln Ile Asp Gln Tyr Glu
 85 90 95
 Leu Gln Leu Leu Leu Asp Gly Pro His Asp Ala Asn Asn Ala Ile Leu
 100 105 110
 Glu Leu His Pro Gly Ala Gly Gly Thr Glu Ser Gln Asp Trp Val Ser
 115 120 125
 Met Leu Leu Arg Met Tyr Gln Arg Tyr Cys Glu Gln Asn Gly Phe Lys
 130 135 140
 Val Glu Thr Val Asp Tyr Leu Pro Gly Asp Glu Ala Gly Val Lys Ser
 145 150 155 160
 Val Thr Leu Leu Ile Lys Gly His Asn Ala Tyr Gly Tyr Leu Lys Ala
 165 170 175
 Glu Lys Gly Val His Arg Leu Val Arg Ile Ser Pro Phe Asp Ser Ser
 180 185 190
 Gly Arg Arg His Thr Ser Phe Ala Ser Cys Asp Val Ile Pro Asp Phe
 195 200 205
 Asn Asn Asp Glu Ile Glu Ile Glu Ile Asn Pro Asp Asp Ile Thr Val
 210 215 220
 Asp Thr Phe Arg Ala Ser Gly Ala Gly Gly Gln His Ile Asn Lys Thr
 225 230 235 240
 Glu Ser Ala Ile Arg Ile Thr His His Pro Thr Gly Ile Val Val Asn
 245 250 255
 Asn Gln Asn Glu Arg Ser Gln Ile Lys Asn Arg Glu Ala Ala Met Lys
 260 265 270
 Met Leu Lys Ser Lys Leu Tyr Gln Leu Lys Leu Glu Glu Gln Glu Gln
 275 280 285
 Glu Met Ala Glu Ile Arg Gly Glu Gln Lys Asp Ile Gly Trp Gly Ser
 290 295 300
 Gln Ile Arg Ser Tyr Val Phe His Pro Tyr Ser Met Ile Lys Asp His
 305 310 315 320
 Arg Thr Asn Glu Glu Thr Gly Lys Val Asp Ala Val Met Asp Gly Glu
 325 330 335
 Ile Gly Pro Phe Ile Glu Ala Tyr Leu Arg Lys Glu Met Asp Ser Arg
 340 345 350
 Asp Val

<210> 7346

<211> 42

<212> PRT

<213> S.epidermidis

<400> 7346

Gln His Val Gly Asp Ala Val Arg Arg Cys Ser Gly Tyr Tyr Ala Ala
 1 5 10 15
 Thr Ala Lys Leu Leu Phe Asp Leu Ser Val Ile Phe Asn Arg Asn Val
 20 25 30
 Leu Met Thr Glu Pro Thr Leu Arg His Ala

35

40

<210> 7347
 <211> 231
 <212> PRT
 <213> S.epidermidis

<400> 7347

```

Gln Leu Lys Gly Asp Gly Leu Met Arg Lys Cys Ile Gln Cys Asn Gln
1      5      10      15
Pro Ile His Glu Thr Ile His Ile Tyr Asn Leu Phe Lys Pro Pro Gln
      20      25      30
Ile Phe Cys Glu Arg Cys Glu Thr Leu Trp Leu Asn Ser Lys Ile His
      35      40      45
Lys Asp Gly Arg Cys Pro Lys Cys Leu Asn Asn Lys Ile Ser Thr Asp
      50      55      60
Gly Glu Cys His Asp Cys Gln Phe Leu Ser Lys Thr Phe Tyr Leu Met
65      70      75      80
Glu Gln Leu Phe Cys Asp Tyr Ser Tyr Asp Gly Met Met Lys Glu Ile
      85      90      95
Ile His Gln Tyr Lys Ile Lys Arg Asp Phe Tyr Leu Ala Glu Val Leu
      100     105     110
Ala Arg Lys Leu Val Leu Pro Gln Thr Gln Tyr Asp Tyr Ile Val Pro
      115     120     125
Ile Pro Ser Pro Ile Glu Arg Asp Ile Glu Arg Thr Phe Asn Pro Val
      130     135     140
Thr Thr Val Leu Asp Lys Met Gly Ile Ser Tyr Gln Asp Val Leu Gly
145     150     155     160
Thr His Ile Arg Pro Lys Gln Ser Lys Leu Gly Lys Ile Glu Arg Ser
      165     170     175
Lys Ala Pro Asn Pro Phe Tyr Ile Lys Asp Glu Glu Ile Asn Ile Glu
      180     185     190
Gly Lys Val Ile Leu Leu Ile Asp Asp Ile Tyr Thr Thr Gly Leu Thr
      195     200     205
Ile His His Ala Gly Cys Lys Leu Tyr Asp Lys Lys Val Arg Lys Phe
      210     215     220
Lys Val Phe Ala Phe Ala Arg
225      230

```

<210> 7348
 <211> 226
 <212> PRT
 <213> S.epidermidis

<400> 7348

```

Tyr Arg Lys Gly Val Ile Ile Met Ser Gln Ser Thr His Gln Ser Thr
1      5      10      15
Asp His Lys Arg Gln Ser Gln Asp Lys Asn Gln Thr His Ala Tyr Ala
      20      25      30
Lys Val Trp Leu Tyr Phe Met Tyr Tyr Trp Met Ile Phe Gly Ile Gly
      35      40      45
Cys Tyr Phe Gly Gln Tyr Leu Pro Met Ser Trp Arg Lys Pro Leu Ser
      50      55      60
Leu Gly Leu Leu Ile Leu Ile Leu Ala Thr Leu Phe Ile Lys Arg Ala
65      70      75      80
Arg Lys Tyr Gly Leu Val Ile Ser His Ile Tyr Ala Ile Ile Val Gly

```

				85					90					95			
Leu	Leu	Ser	Tyr	Ala	Leu	Phe	Thr	Thr	Tyr	Leu	Gln	Asn	Leu	Gly	Ala		
			100					105					110				
Glu	Val	Phe	Tyr	Lys	Asn	Ile	Ile	Leu	Ala	Ile	Gly	Ala	Phe	Ile	Ala		
		115					120					125					
Phe	Gly	Ile	Ile	Gly	Tyr	Phe	Leu	Ile	Lys	Asp	Ala	Ser	Ser	Met	Gly		
	130					135					140						
Lys	Tyr	Leu	Phe	Val	Thr	Leu	Ile	Ala	Leu	Ile	Ile	Ala	Gly	Ile	Ile		
145					150					155					160		
Gly	Ile	Phe	Ile	Asn	Asn	Pro	Ile	Phe	His	Thr	Val	Ile	Thr	Ile	Val		
			165						170					175			
Ser	Leu	Leu	Leu	Phe	Leu	Leu	Tyr	Thr	Leu	Tyr	Asp	Phe	Asn	Arg	Met		
			180					185					190				
Lys	Arg	Gly	Gln	Phe	Ser	Pro	Arg	Glu	Met	Gly	Phe	Asn	Leu	Phe	Ile		
		195					200					205					
Asn	Leu	Leu	Asn	Ile	Ile	Glu	Asp	Ile	Leu	Ser	Leu	Ala	Asn	Arg	Phe		
	210					215					220						
Lys	Asn																
225																	

<210> 7349

<211> 264

<212> PRT

<213> S.epidermidis

<400> 7349

Leu	Lys	Gly	Gly	Ala	Lys	Met	Asn	Lys	Ile	Gln	Ile	Cys	Asn	Gln	Ile		
1				5					10					15			
Glu	Leu	Asn	Tyr	Ile	Asp	Glu	Gly	Glu	Gly	Ile	Pro	Ile	Ile	Leu	Ile		
		20						25					30				
His	Gly	Leu	Asp	Gly	Asn	Leu	Ala	Gly	Phe	Lys	Asp	Leu	Lys	Asn	Glu		
	35					40						45					
Leu	Lys	Lys	Gln	Tyr	Arg	Val	Ile	Thr	Tyr	Asp	Val	Arg	Gly	His	Gly		
	50					55				60							
Lys	Ser	Ser	Arg	Thr	Glu	Ser	Tyr	Glu	Leu	Lys	Asp	His	Val	Glu	Asp		
65				70					75					80			
Leu	Asn	Asp	Leu	Met	Gly	Ala	Leu	Asn	Ile	Asp	Ser	Ala	His	Ile	Leu		
			85					90					95				
Gly	His	Asp	Met	Gly	Gly	Ile	Ile	Ala	Ser	Glu	Phe	Thr	Glu	Lys	Tyr		
		100						105					110				
Gln	Tyr	Lys	Val	Ile	Thr	Leu	Thr	Ile	Val	Ser	Ala	Lys	Ser	Glu	Asp		
		115					120					125					
Ile	Ala	Asn	Gly	Phe	Asn	Lys	Leu	Met	Val	Asp	Tyr	Gln	Glu	Glu	Leu		
	130					135				140							
Ala	Gly	Phe	Asn	Lys	Ser	Glu	Ala	Met	Ile	Ile	Leu	Phe	Ser	Lys	Leu		
145					150					155					160		
Phe	Lys	Glu	Lys	Asp	Lys	Ala	Met	Lys	Trp	Tyr	Gln	Ser	Gln	Lys	Leu		
			165					170						175			
Tyr	Asn	Arg	Pro	Thr	Pro	Glu	Glu	Ser	Ala	Ile	Ala	Val	Arg	Ala	Leu		
		180						185					190				
Leu	Asn	Ile	Lys	Asp	Leu	Thr	Arg	Val	His	His	Asn	Val	Ser	Ile	Pro		
		195					200					205					
Thr	Leu	Ile	Val	Asn	Gly	Lys	Tyr	Asp	Pro	Leu	Ile	Gln	Asn	Lys	Ser		
	210					215					220						
His	Tyr	Asp	Met	Asp	Gln	Tyr	Tyr	Asp	Gln	Val	Thr	Lys	Ile	Val	Phe		
225					230					235					240		

Asp Asn Ser Gly His Ala Pro His Ile Glu Glu Pro Glu Lys Phe Leu
 245 250 255
 Lys Leu Tyr Leu Asp Phe Val Ser
 260

<210> 7350
 <211> 258
 <212> PRT
 <213> S.epidermidis

<400> 7350
 Ile Arg Gly Gly Ile Ala Val Ile Ser Glu Lys Arg Gln Asn Leu Ile
 1 5 10 15
 Leu Gln Glu Leu Thr Gln Lys Asp Phe Leu Thr Leu Gln Asp Leu Val
 20 25 30
 Asp Arg Thr Gly Cys Ser Ala Ser Thr Ile Arg Arg Asp Leu Ser Lys
 35 40 45
 Leu Gln Asn Met Gly Lys Leu Gln Arg Val His Gly Gly Ala Thr Ile
 50 55 60
 His Gln Asn Arg Val Lys Glu Pro Lys Leu Ser Glu Lys Arg Thr Gln
 65 70 75 80
 Asn Leu Arg Glu Lys Gln Glu Ile Ala Lys Arg Ala Ala Cys Asp Ile
 85 90 95
 Gln Asp His Glu Cys Ile Phe Leu Asp Ala Gly Ser Ser Thr Phe Glu
 100 105 110
 Leu Ile Gln Tyr Ile Glu Ala Lys Asp Ile Thr Val Val Thr Asn Gly
 115 120 125
 Met Thr His Val Glu Glu Leu Lys His Gly Ile Lys Thr Leu Met
 130 135 140
 Val Gly Gly Gln Val Lys Pro Thr Thr Met Ala Thr Val Gly Ala Asn
 145 150 155 160
 Ala Leu Glu Thr Leu Arg Arg Tyr Cys Phe Asp Arg Ala Phe Ile Gly
 165 170 175
 Met Asn Gly Ile Asp Val Lys Tyr Gly Leu Thr Thr Pro Asp Glu Gln
 180 185 190
 Glu Ala Leu Ile Lys Glu Thr Ala Met Lys Leu Ser Asn His Lys Tyr
 195 200 205
 Val Leu Val Asp Gln Ser Lys Phe Asn Gln Ile Tyr Phe Ala Arg Val
 210 215 220
 Pro Ile Leu Asp Gly Leu Ser Ile Ile Thr Ser Gln Lys Ala Met Gln
 225 230 235 240
 Ser Lys Met Thr Glu Ala Tyr Met Asn Glu Phe Asn Phe Ile Gly Gly
 245 250 255
 Lys Ser

<210> 7351
 <211> 187
 <212> PRT
 <213> S.epidermidis

<400> 7351
 Ile Glu Met Gly Lys Leu Gly Gln Gln Ile Ile Gly Tyr His Cys Asn
 1 5 10 15
 Asp Glu Val Lys Ile Asp Lys Phe Lys Asn Arg Glu Val Ser Leu Leu
 20 25 30

Ile Ser Tyr Glu Asp Asp Ile Trp Leu Gly Asn Gly Met Tyr Phe Trp
 35 40 45
 Glu Asn Lys Ser Asn Leu Asp Tyr Trp Lys Arg Asn Arg Glu Arg Asn
 50 55 60
 Tyr Pro Asp Lys Asn Phe Ser Ser Val Glu Val Met Leu Ser Leu Asp
 65 70 75 80
 Phe Leu Leu Asp Leu Ser Asp Lys Glu His Arg Lys Phe Cys Lys Lys
 85 90 95
 Val Leu Ser Asp Leu Ile Glu Arg Gly Lys Asp Asn Gly Ile Asp Glu
 100 105 110
 Ser Ile Phe Asn Asn Asp Leu Gly Glu Val Ile Asn Val Leu Phe Ser
 115 120 125
 Lys Thr Asp Ile Leu Ala Ser His Phe Asn Val Leu Arg Thr His Gly
 130 135 140
 Leu Tyr Asn Trp Ser Glu Asp Lys Phe Leu Val Gly Asn Asp Asn Lys
 145 150 155 160
 Tyr Gln Ser Val Asn Arg Pro Thr Ser Asn Val Lys Thr Ile Tyr Cys
 165 170 175
 Val Lys Asn Glu Arg Ala Ile Leu Glu Ile Leu
 180 185

<210> 7352

<211> 357

<212> PRT

<213> S.epidermidis

<400> 7352

Glu Ser Ile Phe Asn Leu Ile Thr Lys Gln His Lys Glu Ala Ile Asn
 1 5 10 15
 Val Ile Lys Leu Asn Gln Ile Val Lys Arg Tyr His Thr Lys Asp Lys
 20 25 30
 Asp Val Leu Ala Val Asp His Val Asp Leu Asn Ile Glu Ser Gly Ser
 35 40 45
 Ile Phe Gly Val Ile Gly Phe Ser Gly Ala Gly Lys Ser Thr Leu Ile
 50 55 60
 Arg Met Phe Asn Asn Leu Glu Ser Pro Thr Ser Gly Glu Ile Ile Ile
 65 70 75 80
 Asp Gly Asp Asn Ile Ser Gln Leu Ser Lys Ser Gln Leu Arg Lys Lys
 85 90 95
 Arg Gln Lys Val Ser Met Ile Phe Gln His Phe Asn Leu Leu Trp Ser
 100 105 110
 Arg Asn Val Leu Lys Asn Val Thr Phe Pro Leu Glu Ile Ala Gly Val
 115 120 125
 Pro Ser Gly Leu Ala Lys Gln Lys Ala Leu Glu Leu Ile Glu Leu Val
 130 135 140
 Gly Leu Lys Gly Arg Glu Ser Ala Tyr Pro Ser Glu Leu Ser Gly Gly
 145 150 155 160
 Gln Lys Gln Arg Val Gly Ile Ala Arg Ala Leu Ala Asn Asp Pro Asp
 165 170 175
 Val Leu Leu Cys Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Thr Thr
 180 185 190
 Asp Glu Ile Leu Asp Leu Leu Leu Lys Val Arg Glu Gln Gln Asn Leu
 195 200 205
 Thr Ile Val Leu Ile Thr His Glu Met His Val Ile Arg Arg Ile Cys
 210 215 220
 Asp Glu Val Ala Val Met Glu Asn Gly Lys Val Ile Glu Gln Gly Ala

Gly Ala Leu Phe Gln Val Phe Phe Phe Asp Lys Phe Met Lys Tyr Met
 260 265 270
 Ser Glu Leu Asn Phe Ile Ala Trp Ser Leu Leu Tyr Ser Ala Ile Val
 275 280 285
 Leu Val Met Leu Val Leu Ala Asn Gly Tyr Trp Thr Ile Met Ile Ile
 290 295 300
 Ser Phe Val Val Phe Ile Gly Phe Asp Met Ile Arg Pro Ala Leu Thr
 305 310 315 320
 Asn Tyr Phe Ser Asn Ile Ala Gly Lys Arg Gln Gly Phe Ala Gly Gly
 325 330 335
 Leu Asn Ser Thr Phe Thr Ser Met Gly Asn Phe Ile Gly Pro Leu Val
 340 345 350
 Ala Gly Ala Leu Phe Asp Val Asn Leu Glu Phe Pro Leu Tyr Met Ala
 355 360 365
 Ile Ala Val Ser Leu Ser Gly Ile Ile Ile Ile Phe Ile Glu Lys Gly
 370 375 380
 Leu Lys Ser Arg Arg Lys Glu Ala Asn
 385 390

<210> 7354

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7354

Ile Val Ile Leu Asp Thr Asp Gln Ser Phe Lys Leu Val Ile Leu Asn
 1 5 10 15
 Ile Arg Phe Gln Phe Phe Leu Leu Gln Leu Asn Asn Ser Thr Tyr Leu
 20 25 30
 Ile Tyr Leu Leu Lys Gln Val Ser
 35 40

<210> 7355

<211> 309

<212> PRT

<213> S.epidermidis

<400> 7355

Ile Thr Phe Leu Thr His Cys Val Ile Phe Ile Phe Asn Lys Ile Phe
 1 5 10 15
 Tyr Ser Leu Tyr Thr Arg Leu Ile Asn Leu Thr Thr Asp Val Leu Tyr
 20 25 30
 Ile Ile Ile Tyr Ile Asn Val Tyr Lys Glu Gly Thr Lys Met Ser Val
 35 40 45
 Ser Val Asn Ile Glu Asn Leu Thr Lys Glu Tyr Arg Ile Tyr Arg Asn
 50 55 60
 Asn Lys Asp Arg Ile Lys Asp Ala Leu Ile Pro Lys Asn Lys Asn Lys
 65 70 75 80
 Thr Phe Tyr Ala Leu Asp Asn Val Ser Leu Thr Ala His Glu Gly Asp
 85 90 95
 Val Ile Gly Leu Val Gly Ile Asn Gly Ser Gly Lys Ser Thr Leu Ser
 100 105 110
 Asn Met Ile Gly Gly Ser Ile Ser Pro Ser Ser Gly Glu Ile Thr Arg
 115 120 125
 His Gly Asp Val Ser Val Ile Ala Ile Asn Ala Gly Leu Asn Gly Gln
 130 135 140

Leu Asn Lys Lys Ile Ser Ile Asn Asn Arg Ile Leu Phe Met Ile Thr
 115 120 125
 Trp Asn Ile Asp Glu Pro Gly Gly Val Ile Lys Leu Ile Lys His Leu
 130 135 140
 Ala Ile Tyr Ser Ile Ala Thr Glu Leu Phe Gly Thr Leu Cys Leu Cys
 145 150 155 160
 Leu Ser Phe Ile Pro Lys Phe Gly Ile Gly Lys Gly Leu Phe Leu Ser
 165 170 175
 Leu Phe Thr Ser Val Ser Ala Phe Asn Asn Ala Gly Phe Ala Leu Phe
 180 185 190
 Lys Asn Asn Leu Ile Asp Phe Ser Asn Asp Pro Val Ile Ile Ile Thr
 195 200 205
 Ile Pro Ile Leu Ile Ile Leu Gly Gly Leu Gly His Leu Val Val Val
 210 215 220
 Asp Leu Trp Asn Ala Lys Ser Phe Arg Lys Leu Ser Leu His Ser Lys
 225 230 235 240
 Leu Val Leu Thr Thr Thr Gly Leu Leu Ile Leu Ile Gly Thr Val Phe
 245 250 255
 Phe Phe Leu Leu Glu Asn Gln Asn Ser Met Leu His Met Gly Leu Ile
 260 265 270
 Glu Lys Ile Gly Asn Ala Phe Phe Gln Ser Val Thr Thr Arg Thr Ala
 275 280 285
 Gly Phe Asn Thr Ile Asp Val Gly Asn Ile Lys Thr Pro Thr Ala Leu
 290 295 300
 Leu Leu Met Ala Leu Met Phe Ile Gly Gly Ala Pro Leu Ser Ala Ala
 305 310 315 320
 Gly Gly Ile Lys Val Thr Thr Phe Val Ile Ala Thr Ile Ala Ile Phe
 325 330 335
 Asn Thr Ile Arg Lys Glu Lys Asn Asn Ser Ile Phe Asn Arg Glu Ile
 340 345 350
 Ser Glu Arg Tyr Ile Gln Leu Ser Phe Val Thr Ile Leu Ile Ser Ile
 355 360 365
 Ala Phe Ile Gly Met Val Thr Phe Ile Leu Thr Ile Ile Asn Ser Asn
 370 375 380
 Ile Pro Leu Ile Lys Ile Leu Phe Glu Val Val Ser Ala Phe Gly Thr
 385 390 395 400
 Val Gly Leu Thr Met Asp Leu Thr Ser Glu Tyr Tyr Asn Trp Thr Glu
 405 410 415
 Phe Ile Ile Ile Ile Val Met Leu Cys Gly Lys Ile Gly Leu Leu Asn
 420 425 430
 Ile Ser Arg Ala Leu Val Pro Pro Lys Asp Pro Lys Asn Tyr Arg Tyr
 435 440 445
 Thr Lys Gly His Ile His Leu
 450 455

<210> 7358

<211> 44

<212> PRT

<213> S.epidermidis

<400> 7358

Gly Asp Ile Ile Leu Ser Ala Lys Arg Val Pro Val Phe Phe Asn Pro
 1 5 10 15
 Asn Thr Arg Trp Gly Ile Lys Phe Asn Lys Lys Glu Val Val Val Lys
 20 25 30
 Lys Gly Thr Phe Glu Val Phe Gln Pro Gly Lys Asn

35

40

<210> 7359
 <211> 241
 <212> PRT
 <213> S.epidermidis

<400> 7359

```

Asp Asp Ile Met Gly Arg Lys Trp Asn Asn Ile Lys Glu Lys Lys Ala
1      5      10      15
Gln Lys Asp Lys Asn Thr Ser Arg Ile Tyr Ala Lys Phe Gly Lys Glu
20      25      30
Ile Tyr Val Ala Ala Lys Ser Gly Glu Pro Asn Pro Glu Ser Asn Gln
35      40      45
Thr Leu Arg Leu Val Leu Glu Arg Ala Lys Thr Tyr Ser Val Pro Asn
50      55      60
His Ile Ile Asp Arg Ala Ile Asp Lys Ala Lys Gly Ala Gly Asp Glu
65      70      75      80
Asn Tyr Asp His Leu Arg Tyr Glu Gly Phe Gly Pro Asn Gly Ser Met
85      90      95
Leu Ile Val Asp Ala Leu Thr Asn Asn Val Asn Arg Thr Ala Ser Asp
100     105     110
Val Arg Ala Ala Phe Gly Lys Asn Gly Gly Asn Met Gly Val Ser Gly
115     120     125
Ser Val Ala Tyr Met Phe Asp His Thr Ala Thr Phe Gly Val Glu Gly
130     135     140
Lys Ser Val Asp Glu Val Leu Glu Thr Leu Met Glu Gln Asp Ile Asp
145     150     155     160
Val Arg Asp Val Ile Asp Asp Asn Gly Leu Thr Ile Val Tyr Ala Glu
165     170     175
Pro Asp Gln Phe Ala Gln Val Gln Asp Ala Leu Arg Glu Ala Gly Val
180     185     190
Glu Glu Phe Lys Val Ala Glu Phe Glu Met Leu Pro Gln Thr Asp Ile
195     200     205
Glu Leu Ser Glu Glu Asp Gln Ala Ile Phe Glu Lys Leu Ile Asp Ala
210     215     220
Leu Glu Asp Leu Glu Asp Val Gln Asn Val Phe His Asn Val Asp Leu
225     230     235     240
Lys

```

<210> 7360
 <211> 507
 <212> PRT
 <213> S.epidermidis

<400> 7360

```

Leu Ile Ile Ile Val Ile Gln Asn Glu Glu Arg Arg Ile Tyr Met Gln
1      5      10      15
Phe Phe Ile Asn Gln Asp Thr Pro Thr Ser Ile Glu Thr Ile Val Val
20      25      30
Gly Val Pro Asp His Leu Asn Gln Leu Gly Glu Ile Lys Tyr His Lys
35      40      45
Thr Leu Ile Lys Glu Arg Leu Glu Thr Leu Lys Gln Tyr His Val Ile
50      55      60
Asn Ser Ser Ile Gly Lys Ile Ser Ser Thr Leu Ile Tyr Ile Asp Glu

```

65					70					75					80
Lys	Pro	Lys	Arg	Leu	Leu	Thr	Val	Gly	Leu	Gly	Asn	Leu	Lys	Ile	Leu
			85						90					95	
Ser	Tyr	Gln	Arg	Leu	Leu	Lys	Val	Trp	Gly	Gln	Leu	Phe	Gln	Tyr	Leu
			100					105					110		
Lys	Asp	Val	His	Val	Thr	Asp	Cys	Glu	Leu	Leu	Leu	Asp	Thr	Phe	Lys
		115					120					125			
Ser	Lys	His	Gly	Asn	Ile	Val	Glu	Ile	Cys	Gln	Thr	Leu	Gly	Leu	Gln
	130					135					140				
Ser	Ala	Gln	Ser	Ile	Phe	Glu	Phe	Asp	His	Tyr	Lys	Ser	Asp	Lys	Lys
145					150					155					160
Pro	Pro	Tyr	Gln	Gly	Arg	Val	Tyr	Ile	Gln	Thr	Thr	Glu	His	Asn	Ile
			165						170					175	
Glu	Thr	Lys	Ile	Asn	Glu	Gly	Gln	Gln	Leu	Gly	Glu	Ser	Ile	Asn	Tyr
			180					185					190		
Ala	Arg	Glu	Leu	Ser	Gln	Ile	Pro	Pro	Asn	Ile	Leu	Thr	Pro	Gln	Tyr
		195					200					205			
Phe	Ala	Glu	Glu	Ile	Lys	Lys	His	Phe	Glu	Gly	Ser	Ser	Val	Ser	Val
	210					215					220				
Asp	Ile	Lys	Asp	His	Arg	Gln	Ile	Ile	Asp	Glu	Gly	Phe	Gly	Leu	Ile
225					230					235					240
His	Ala	Val	Gly	Lys	Gly	Ser	Asn	His	Gly	Pro	Arg	Leu	Ile	Thr	Val
			245						250					255	
Ser	Tyr	Tyr	Gly	Ala	Glu	Ala	Asp	Glu	Pro	Pro	Ile	Ser	Leu	Val	Gly
			260					265					270		
Lys	Gly	Ile	Thr	Tyr	Asp	Ser	Gly	Gly	Tyr	Ser	Ile	Lys	Ser	Lys	Ile
		275					280					285			
Gly	Met	Gln	Thr	Met	Lys	Tyr	Asp	Met	Cys	Gly	Ala	Ala	Asn	Val	Ile
	290					295					300				
Gly	Met	Ile	Asp	Val	Ile	Ser	Lys	Gln	Asn	Leu	Pro	Val	Asn	Ile	Val
305					310					315					320
Gly	Ile	Ile	Ala	Ser	Ala	Glu	Asn	Met	Ile	Gly	Glu	Ser	Ser	Met	Lys
			325						330					335	
Pro	Asp	Asp	Val	Phe	Thr	Ala	Leu	Asn	Gly	Glu	Thr	Val	Glu	Met	Leu
			340					345					350		
Asn	Ser	Asp	Ala	Glu	Gly	Arg	Met	Val	Leu	Gly	Asp	Ala	Val	Phe	Tyr
		355					360					365			
Ala	Thr	Gln	Phe	Lys	Pro	Gln	Leu	Ile	Leu	Asp	Phe	Ala	Thr	Leu	Thr
	370					375					380				
Gly	Ala	Ala	Ile	Val	Ala	Leu	Gly	Asp	Asp	Lys	Ala	Ala	Ala	Phe	Gln
385					390					395					400
Ser	His	Ala	Glu	Asn	Glu	Leu	Lys	Asn	Leu	Leu	Thr	Val	Ala	Arg	His
			405					410						415	
Val	Asp	Glu	Lys	Val	Phe	Glu	Leu	Pro	Ile	Thr	Glu	Thr	Glu	Arg	His
		420						425					430		
Leu	Ile	Lys	Gln	Ser	Asp	Val	Ala	Asp	Leu	Val	Asn	His	Thr	Asn	Gly
		435					440					445			
Gln	Gly	Lys	Ala	Leu	Phe	Ala	Ala	Ala	Phe	Ile	Ser	His	Phe	Ser	Gly
	450					455					460				
Asp	Ile	Pro	His	Ile	His	Phe	Asp	Ile	Ala	Gly	Pro	Ala	Thr	Thr	Lys
465					470					475					480
Ser	Ala	Thr	Tyr	Lys	Gly	Pro	Lys	Gly	Pro	Thr	Gly	Tyr	Met	Ile	Pro
			485						490					495	
Thr	Val	Val	Glu	Trp	Leu	Gln	Gln	Lys	Tyr	Lys					
			500					505							

<210> 7361
 <211> 290
 <212> PRT
 <213> S.epidermidis

<400> 7361

Lys Glu Ile Ile Met Lys Lys Phe Lys Trp Ile Asn Ile Phe Lys Gly
 1 5 10 15
 Phe Gly Met Gly Thr Ser Asp Leu Val Pro Gly Val Ser Gly Gly Thr
 20 25 30
 Ile Ala Leu Leu Gly Ile Tyr Asp Asp Phe Ile Ser Ser Ile Ser
 35 40 45
 Gly Leu Phe Ser Arg Arg Phe Trp Pro Ser Leu Lys Phe Leu Leu Pro
 50 55 60
 Ile Leu Val Gly Met Leu Ile Ala Ile Gly Leu Leu Ser Gln Leu Phe
 65 70 75 80
 Asn Tyr Leu Leu Ser Gln His His Ile Pro Thr Met Leu Phe Phe Thr
 85 90 95
 Gly Leu Ile Leu Gly Ile Ile Pro Tyr Leu Leu Thr Ile Ser Asn Phe
 100 105 110
 Lys Lys Asn Phe Ser Ile Ile His Tyr Phe Ile Leu Leu Leu Gly Ile
 115 120 125
 Ala Ile Ile Val Val Phe Ala Leu Leu Asn His Gly Asp Lys His Ser
 130 135 140
 Gly Glu Thr Leu Thr Leu Ser Phe Ser Leu Ile Ile Lys Tyr Phe Ile
 145 150 155 160
 Ala Gly Val Phe Ala Ser Ser Ala Met Leu Leu Pro Gly Ile Ser Gly
 165 170 175
 Ser Phe Met Leu Leu Val Phe Gly Val Tyr Gly Thr Leu Met Tyr Ala
 180 185 190
 Ile Ser Glu Leu Leu His Phe Asn Leu Asn Ala Leu Pro Ile Ile Leu
 195 200 205
 Ile Val Gly Phe Gly Ile Val Thr Gly Phe Met Ile Ser Ser Arg Leu
 210 215 220
 Ile Gln Tyr Cys Leu His Gln His Pro Thr Met Thr Phe Ala Leu Ile
 225 230 235 240
 Ile Gly Phe Val Ile Gly Ser Leu Tyr Ala Val Phe Pro Gly Phe Pro
 245 250 255
 Lys Asp Leu Ile Gln Trp Ile Ile Ser Phe Phe Leu Leu Ile Thr Gly
 260 265 270
 Phe Leu Val Ser Tyr Val Leu Gly Lys Ile Thr Ala Lys Asn Glu Ala
 275 280 285
 Ser Phe
 290

<210> 7362
 <211> 168
 <212> PRT
 <213> S.epidermidis

<400> 7362

Met Ile Val Ile Lys Gly Glu Asn Met Ser Lys Thr Lys Lys Thr Asn
 1 5 10 15
 Ala Met Arg Ile Leu Asp Arg Ala Lys Ile Asn Tyr Gln Met Asn Thr
 20 25 30
 Tyr Glu Val Thr Asp Lys His Gln His Gly Glu Glu Ile Ala Gln Leu

35 40 45
 Val Gly Ala Lys Ile Glu Glu Val Phe Lys Thr Leu Val Leu Glu Asn
 50 55 60
 Ser Asn His Glu His Tyr Val Phe Val Ile Pro Val Asn Glu Thr Leu
 65 70 75 80
 Asp Met Lys Lys Ala Ala His Val Val Asn Glu Lys Lys Leu Asn Leu
 85 90 95
 Met Pro Leu Asp Gln Leu Lys Gln Val Thr Gly Tyr Val Arg Gly Gly
 100 105 110
 Cys Ser Pro Ile Gly Met Lys His Ser Phe Lys Thr Thr Ile Asp Ala
 115 120 125
 Ser Ala Lys Asn Leu Glu Lys Val Tyr Ile Ser Gly Gly Gln Arg Gly
 130 135 140
 Met Gln Ile Ile Ile His Val Asn Asp Leu Ile Asp Met Thr Lys Ala
 145 150 155 160
 Gln Val Glu Ser Ile Thr Gln Asn
 165

<210> 7363
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7363
 Arg Cys Val Ile Ile Ser Phe Val Tyr Asn Glu Arg Arg Thr Ile Phe
 1 5 10 15
 Met His Thr Leu Ile Ile Val Leu Leu Ile Ile Asp Cys Ile Ala Leu
 20 25 30
 Val Thr Val Val Leu Leu Gln Glu Gly
 35 40

<210> 7364
 <211> 41
 <212> PRT
 <213> S.epidermidis

<400> 7364
 Ile Leu Val Ile Tyr Ile Ile Phe Gln Val Gly Ala Thr Ile Val Ile
 1 5 10 15
 Cys Thr Phe Met Ile Tyr Ile Val Thr Leu Ser Val Thr Arg Ile Lys
 20 25 30
 Asn Lys Gln Lys Arg Ser Ala Leu Thr
 35 40

<210> 7365
 <211> 208
 <212> PRT
 <213> S.epidermidis

<400> 7365
 Cys Val Val Met Gln Ser Arg Tyr Phe Ala Arg Ile Tyr Phe Ile Ile
 1 5 10 15
 Leu Phe Val Ile Ser Met Thr Glu Ser His Ile Phe Asn Phe Met Thr
 20 25 30
 Leu Asn Leu Phe Leu Ala Tyr Val Pro Phe Glu Leu Cys Leu Leu Leu
 35 40 45

3351

Lys	Leu	Phe	Lys	Pro	Val	Lys	Ala	Phe	Glu	Trp	Pro	Leu	Phe	Ile	Val
50						55					60				
Phe	Gly	Leu	Ile	Phe	Leu	Leu	Leu	Val	Pro	Asn	Thr	Phe	Tyr	Met	Ile
65					70					75					80
Thr	Asp	Leu	Ile	His	Leu	Asn	Gln	Phe	Gln	Phe	Asn	Phe	Leu	Ala	Gly
				85						90				95	
Leu	Asn	Ile	Thr	Glu	Trp	Ile	Tyr	Phe	Thr	Tyr	Leu	Ile	Leu	Gly	Val
			100					105					110		
Leu	Leu	Ala	Ile	Tyr	Leu	Thr	Ile	Leu	Ile	Phe	Leu	Glu	Ile	Ala	His
		115					120					125			
Phe	Thr	Ser	Tyr	Val	Trp	Leu	Asn	Arg	Leu	Leu	Ile	Val	Ile	Leu	Met
130						135					140				
Phe	Leu	Asn	Gly	Leu	Gly	Ile	Tyr	Ile	Gly	Arg	Phe	Leu	Arg	Leu	His
145					150					155					160
Thr	Val	Tyr	Leu	Leu	Asn	Ala	Pro	Leu	Lys	Ile	Val	Lys	Glu	Val	Phe
				165					170					175	
Leu	Ile	Ile	Asp	Val	Lys	Ala	Leu	Leu	Phe	Val	Val	Leu	Met	Val	Leu
			180					185					190		
Ile	Gln	Ala	Thr	Val	Ile	Leu	Phe	Ile	Lys	Gly	Val	Arg	Leu	Tyr	Gln
		195					200					205			

<210> 7366
 <211> 79
 <212> PRT
 <213> S.epidermidis

<400> 7366

Gly	Gly	Ile	Phe	Met	Ile	Thr	Lys	Glu	Asp	Ile	Val	Ala	Asp	Val	Val
1				5					10					15	
Thr	Asp	Tyr	Pro	Lys	Ser	Ala	Asp	Ile	Phe	Arg	Asn	Ala	Gly	Ile	Asp
			20					25					30		
Phe	Cys	Cys	Gly	Gly	Gln	Glu	Ser	Ile	Ala	Ser	Ala	Val	Asn	His	Lys
		35					40					45			
Pro	Asn	Ile	Asp	Leu	Asn	Ser	Leu	Leu	Asn	Lys	Leu	Asn	His	Ile	Asp
	50					55					60				
Asn	Thr	Glu	Gly	Asn	Ser	Thr	Ile	Asn	Pro	Gly	Thr	Phe	Lys	Trp	
65					70					75					

<210> 7367
 <211> 46
 <212> PRT
 <213> S.epidermidis

<400> 7367

Ile	Met	Ser	Met	Tyr	Tyr	Arg	Asn	Tyr	Thr	His	Tyr	Tyr	Gly	Val	Ile
1				5					10					15	
Lys	Lys	Val	Ser	Asn	Ile	Glu	Lys	Thr	Phe	Lys	Lys	Ile	Ser	Glu	Cys
			20					25					30		
Tyr	Glu	Met	Ile	Lys	Leu	Met	Leu	Ile	Asp	Ile	Met	Lys	Arg		
		35					40					45			

<210> 7368
 <211> 302
 <212> PRT
 <213> S.epidermidis

NCBI Protein = 63657733

<400> 7368

Gly Glu Thr Met Lys Arg Tyr Leu Ile Thr Gly Gly Thr Gly Met Val
 1 5 10 15
 Gly Ser His Leu Val Asn Glu Ile Lys Gln Thr Asp Ala His Ile Thr
 20 25 30
 Ile Leu Thr Arg Gln Asp Lys Thr Ser Asn His Pro Lys Ile Thr Tyr
 35 40 45
 Ile Asn Trp Ser Lys Glu Gly Trp Gln His Gln Val Pro Asp Ile Asp
 50 55 60
 Ile Val Ile Asn Leu Ala Gly Ala Thr Leu Asn Lys Arg Trp Thr Ser
 65 70 75 80
 Ser His Lys Gln Ala Met Met Leu Ser Arg Ile Gln Ser Thr Gln Thr
 85 90 95
 Leu Phe Glu Leu Phe Glu Thr Arg Glu His Lys Pro Glu Val Leu Phe
 100 105 110
 Asn Ala Ser Ala Met Gly Tyr Tyr Pro Pro Asp Leu Phe Thr Ser Tyr
 115 120 125
 Thr Glu Leu Tyr Arg Thr Leu Pro Phe Asp Phe Leu Ser Glu Ile Val
 130 135 140
 Tyr Gln Trp Glu Arg Phe Ala Asn Lys Phe Lys Gln Phe Gly Thr Arg
 145 150 155 160
 Val Val Leu Gly Arg Phe Gly Leu Ile Leu Ser Asp Asp Gly Gly Ala
 165 170 175
 Leu Glu Met Met Glu Leu Pro Tyr Arg Leu Tyr Val Gly Gly Lys Leu
 180 185 190
 Gly Ser Gly Arg Gln Trp Tyr Ser Trp Ile His Ile Asp Asp Leu Ile
 195 200 205
 Arg Gly Ile Leu Phe Thr Ile Asn His Asp Asn Ala Glu Gly Pro Phe
 210 215 220
 Asn Leu Thr Ala Pro Ile Pro Glu Arg Gln Asn Leu Phe Gly Tyr Thr
 225 230 235 240
 Leu Ala Arg Ala Met His Lys Pro His Glu Thr Trp Ala Pro Lys Leu
 245 250 255
 Ile Leu Arg Ala Val Leu Gly Gln Met Ser Thr Val Ile Leu Asp Thr
 260 265 270
 Gln Lys Val Leu Pro Asn Lys Leu His Ala Leu Gly Phe Glu Phe Lys
 275 280 285
 Tyr Asn Asn Leu Arg Asn Ala Leu Asp Asp Leu Ile Lys Ala
 290 295 300

<210> 7369

<211> 287

<212> PRT

<213> S.epidermidis

<400> 7369

Gly Asp Ala Met Lys Ile Asp Asp Tyr Arg Leu Leu Ile Thr Leu Asp
 1 5 10 15
 Glu Thr Lys Thr Leu Arg Lys Ala Ala Glu Ile Leu Tyr Ile Ser Gln
 20 25 30
 Pro Ala Val Thr Gln Arg Leu Lys Ala Ile Glu Ala Ala Phe Gly Val
 35 40 45
 Glu Ile Phe Ile Arg Thr Lys Lys Gln Leu Ile Thr Thr Thr Glu Gly
 50 55 60
 Ser Met Ile Ile Glu His Ala Arg Asp Met Leu Lys Arg Glu Arg Leu
 65 70 75 80

Phe Phe Asp Lys Ile Gln Ala His Ile Gly Glu Val Asn Gly Thr Ile
 85 90 95
 Ser Ile Gly Cys Ser Ser Leu Ile Gly Gln Thr Leu Leu Pro Glu Val
 100 105 110
 Leu Ser Leu Tyr Asn Ser Gln Phe Pro Asn Val Glu Ile Gln Val Gln
 115 120 125
 Val Gly Ser Thr Glu Gln Ile Lys Ala His His Arg Asp Tyr His Val
 130 135 140
 Met Ile Thr Arg Gly Asn Lys Val Met Asn Leu Ser Asn Thr His Leu
 145 150 155 160
 Phe Asn Asp Glu His Tyr Phe Ile Tyr Pro Lys Asp Arg Lys Glu Asp
 165 170 175
 Val Thr Lys Leu Pro Phe Ile Glu Phe Gln Ala Asp Pro Ile Tyr Ile
 180 185 190
 Asn Gln Ile Lys Gln Trp Tyr Asn Asp His Leu Gly His Asp Tyr His
 195 200 205
 Ala Thr Ile Thr Val Asp Gln Val Ala Thr Cys Lys Glu Met Leu Leu
 210 215 220
 Ser Gly Val Gly Val Thr Ile Leu Pro Lys Ile Met Met Lys Asn Ile
 225 230 235 240
 Asp Lys Asn Met Phe Glu Phe Glu Lys Val Thr Ile Asp Lys Lys Pro
 245 250 255
 Leu Ile Arg Ser Thr Tyr Met Ser Tyr Asp Ala Ser Met Leu Gln Leu
 260 265 270
 Pro Gln Val Asp Ala Phe Val Asn Leu Met Leu Asn Phe Ile Arg
 275 280 285

<210> 7370

<211> 66

<212> PRT

<213> S.epidermidis

<400> 7370

Pro Leu Tyr Ile Leu Ser Leu Pro Gly Asp Ala Ser Asp Val Cys Leu
 1 5 10 15
 Tyr Ile Leu Leu Ser Gln Ser Pro Thr Pro Cys Phe Tyr Tyr Ile Lys
 20 25 30
 Leu Gly Cys Gln Cys His Leu Lys Ser Gln Ile Asn Thr Val Tyr Ile
 35 40 45
 Asn Val Leu Ile Lys Ser Leu Arg Leu Phe Tyr Tyr Lys Leu Ile Tyr
 50 55 60
 Phe Thr
 65

<210> 7371

<211> 297

<212> PRT

<213> S.epidermidis

<400> 7371

Ser Tyr Asn Ile Glu Ala Met Ile Leu Asn Ser Lys Val Lys Gly Ile
 1 5 10 15
 Ile Ala Ile Leu Ile Ser Ala Val Gly Phe Ser Phe Met Ser Val Phe
 20 25 30
 Phe Arg Leu Ala Gly Asp Leu Pro Val Phe Gln Lys Ser Leu Ala Arg
 35 40 45

Asn Phe Val Ala Met Phe Ile Pro Leu Phe Phe Ile Tyr Lys Tyr Arg
 50 55 60
 Gln Pro Met Phe Gly Lys Leu Ser Ser Gln Pro Leu Leu Ile Ser Arg
 65 70 75 80
 Ser Thr Leu Gly Leu Ile Gly Val Leu Leu Asn Ile Tyr Ala Ile Asp
 85 90 95
 His Met Val Leu Ser Asp Ala Asp Thr Leu Met Lys Leu Asn Pro Phe
 100 105 110
 Trp Thr Ile Val Leu Ser Leu Ile Phe Leu His Glu Lys Val Arg Lys
 115 120 125
 Tyr Gln Ile Thr Ala Met Ile Ile Ala Ile Ile Gly Met Leu Leu Ile
 130 135 140
 Val Lys Pro Glu Phe Ser Ser Ser Val Ile Pro Ser Ile Ala Gly Leu
 145 150 155 160
 Leu Ser Gly Ile Phe Ala Ala Ser Ala Tyr Thr Cys Val Arg Ala Leu
 165 170 175
 Ser Thr Arg Glu Lys Pro Tyr Thr Ile Val Phe Tyr Phe Ser Leu Phe
 180 185 190
 Ser Val Val Val Leu Ile Pro Phe Ser Ile Phe Thr Tyr Thr Pro Met
 195 200 205
 Thr Thr Ile Gln Ile Leu Phe Leu Leu Gly Ala Gly Leu Ser Ala Ala
 210 215 220
 Val Gly Gln Ile Gly Ile Thr Leu Ala Tyr Ser Phe Ala Pro Ala Lys
 225 230 235 240
 Asp Ile Ser Ile Phe Thr Tyr Ala Ser Ile Ile Phe Thr Ala Leu Phe
 245 250 255
 Gly Phe Ile Leu Phe Gly Glu Ser Pro Asp Met Phe Ala Thr Val Gly
 260 265 270
 Tyr Ile Val Ile Ile Gly Ala Ser Tyr Tyr Met Phe Asp Lys Ala Arg
 275 280 285
 Arg Glu Thr Thr Ile Asn Gln Asn Asn
 290 295

<210> 7372

<211> 117

<212> PRT

<213> S.epidermidis

<400> 7372

Gly Gly Asn Met Arg Ser Val Ile Lys Leu Glu Asn Thr Phe Ile Phe
 1 5 10 15
 Ile Ile Thr Ile Ala Val Tyr Val Lys Leu Glu Phe Ser Ile Trp Leu
 20 25 30
 Phe Leu Leu Leu Leu Val Pro Asp Ile Phe Met Leu Gly Tyr Val
 35 40 45
 Ile Asn Arg Lys Thr Gly Ser Tyr Val Tyr Asn Ile Gly His Thr Tyr
 50 55 60
 Ile Thr Pro Ile Ile Ile Ala Leu Leu Tyr Leu Tyr Ile Asp Glu Arg
 65 70 75 80
 Leu Leu Leu Gln Ile Ser Leu Ile Trp Leu Ala His Ile Ser Ile Asp
 85 90 95
 Arg Thr Leu Gly Phe Gly Leu Lys Tyr Ser Ser Asp Thr Asp Lys Thr
 100 105 110
 Ile Ile Gln Lys Met
 115

<210> 7373
 <211> 386
 <212> PRT
 <213> S.epidermidis

<400> 7373

Gly Leu Asn Met His Ile Glu Phe Lys Tyr Arg Tyr Tyr Glu Asn Glu
 1 5 10 15
 Lys Asp Tyr Glu Asp Tyr Gln Leu Glu Met Asp Asn Phe Gln Asp Ser
 20 25 30
 Lys Ile Ala Tyr Arg Leu Asp Glu Val Gly Asp Val Ile His Phe Ala
 35 40 45
 Glu Gln Glu Gln Arg Asn Gly Ser Tyr Val Ala Leu Tyr Val Thr Tyr
 50 55 60
 Glu Ala Ala Pro Phe Phe Asn Lys Glu Met Val Val Asn Asn Val Lys
 65 70 75 80
 Gln Ser His Ile Phe Ala Ala Ala Tyr Ser Phe Lys Ser Val Asn Ser
 85 90 95
 Ile Lys Asn Ile Lys Lys Val Met Pro Asn Lys Asn His Ile Lys Thr
 100 105 110
 Glu Gly Phe Tyr Phe Cys Glu Ser Asp Lys Ala Met Ile Asn Lys Ile
 115 120 125
 Lys Ser Ile His Lys Ala Ile Ile Glu Gly Ala Thr Tyr Gln Val Asn
 130 135 140
 Tyr Thr Thr Arg Leu Lys Ala Glu Val Phe Cys Pro Ile Ser His Leu
 145 150 155 160
 Tyr Tyr Gln Leu Thr Met Ser Gln Asn Gly Asn Tyr Thr Val Leu Met
 165 170 175
 Asp Thr Pro Asp Ile Lys Val Ala Ser Ile Ser Pro Glu Leu Phe Phe
 180 185 190
 Gln Lys Gly Asp Tyr Lys Gly Lys Ser Asn Met Ile Val Ser Lys Pro
 195 200 205
 Met Lys Gly Thr Met Pro Arg Gly Lys Asn Val Lys Glu Asp Glu Leu
 210 215 220
 Tyr Tyr Asn Asn Leu Lys Thr Ser Ser Lys Asp Met Ala Glu Asn Val
 225 230 235 240
 Met Ile Val Asp Leu Leu Arg Asn Asp Ile Thr Arg Ile Ala Gln Ser
 245 250 255
 Gly Thr Ile Asp Val Pro Glu Leu Phe Ser Ile Glu Lys Tyr Asp Thr
 260 265 270
 Val Phe Gln Met Thr Ser Thr Val Cys Gly Arg Leu Gln Asp Asp Ile
 275 280 285
 Gln Leu Ile Asp Met Met Arg Ala Leu Phe Pro Cys Gly Ser Ile Thr
 290 295 300
 Gly Ala Pro Lys Ile Asn Thr Met Gln Tyr Ile Ala Gln Leu Glu Asp
 305 310 315 320
 Met Pro Arg Ser Ile Tyr Cys Gly Thr Ile Gly Leu Leu Leu Pro Asn
 325 330 335
 Gln Arg Met Ile Phe Asn Ile Pro Ile Arg Thr Ile Glu Tyr Asn His
 340 345 350
 Glu Glu Ala Val Tyr Gly Val Gly Ala Gly Ile Thr Ile Asp Ser Val
 355 360 365
 Pro Glu Asn Glu Val Gln Glu Phe His Asp Lys Thr Lys Ile Leu Glu
 370 375 380
 Arg Leu
 385

<210> 7374
 <211> 132
 <212> PRT
 <213> S.epidermidis

<400> 7374

Gly	Glu	Asn	Met	Ile	Lys	Val	Asp	Gln	Gln	Tyr	Phe	Glu	Leu	Ile	Glu
1				5					10					15	
Glu	Tyr	Arg	Glu	Cys	Phe	Asp	Glu	Glu	Ile	Phe	Ser	Ala	Arg	Tyr	Ser
		20					25					30			
Asp	Ile	Leu	Asp	Lys	Tyr	Asp	Tyr	Val	Val	Gly	Asp	Tyr	Gly	Tyr	Asp
	35					40					45				
Gln	Leu	Arg	Leu	Lys	Gly	Phe	Tyr	Lys	Asp	Ser	Asn	Lys	Lys	Ala	Glu
	50				55						60				
Ile	Ser	Lys	Arg	Phe	Ser	Ser	Ile	Gln	Asp	Tyr	Ile	Leu	Glu	Tyr	Cys
65				70					75					80	
Asn	Phe	Gly	Cys	Pro	Tyr	Phe	Val	Val	Arg	Arg	Leu	Ser	Pro	Asn	Glu
			85					90					95		
Phe	Ile	Glu	Glu	Ile	Asp	Asp	Lys	Glu	Asp	Ile	Ile	Asp	Lys	Leu	His
		100					105					110			
Asp	Val	Lys	Ile	Gln	Pro	Thr	Ile	Gln	Asp	Thr	Glu	Lys	His	Thr	Gln
	115					120					125				
Ala	Ile	Asp	Gln												
	130														

<210> 7375
 <211> 198
 <212> PRT
 <213> S.epidermidis

<400> 7375

Gly	Met	Asn	Met	Ile	Leu	Met	Ile	Asp	Asn	Gln	Asp	Ser	Phe	Thr	Cys
1				5					10					15	
Asn	Leu	Ile	Asp	Tyr	Ile	Lys	Val	Gln	Thr	Thr	Glu	Glu	Val	Lys	Ile
		20					25					30			
Ile	Ser	Val	Asn	Asp	Leu	Met	Thr	Gln	His	Leu	Asp	Ala	Leu	Asn	Pro
	35					40					45				
Arg	Ala	Ile	Val	Ile	Ser	Pro	Gly	Pro	Gly	Lys	Pro	Ser	Asp	Tyr	Pro
	50					55					60				
Ile	Leu	Ser	Ser	Val	Leu	Glu	Ile	Phe	His	Arg	His	Val	Pro	Ile	Leu
65				70					75					80	
Gly	Val	Cys	Leu	Gly	Phe	Gln	Leu	Ile	Ile	Glu	Tyr	Phe	Gly	Gly	Asn
		85				90						95			
Ile	Ile	His	Asn	Asp	Lys	Pro	Ile	His	Gly	His	Ile	Thr	Lys	Ile	Arg
		100				105						110			
His	Ser	Asn	Glu	Gly	Ile	Phe	Lys	Gly	Leu	Pro	Ser	Tyr	Phe	Asn	Val
	115					120					125				
Met	Arg	Tyr	His	Ser	Leu	Met	Ala	Asp	Pro	Ser	Thr	Ile	Pro	Ser	Ala
	130				135						140				
Leu	Lys	Val	Thr	Ala	Leu	Asn	Asn	Glu	Asn	Val	Ile	Met	Ala	Val	Ala
145				150					155					160	
His	His	Lys	Tyr	Pro	Ile	Tyr	Gly	Leu	Gln	Tyr	His	Pro	Glu	Ser	Ile
		165				170						175			
Leu	Ser	Glu	Tyr	Gly	His	Glu	Gln	Leu	Asn	Leu	Phe	Leu	Thr	Glu	Val
		180				185						190			

Ile Pro Cys Gly Ser Val Ile Met Glu Gly Lys Lys Cys Gly Ile Val
 180 185 190
 Thr Thr Asp Thr Tyr Asn Asp Trp Leu Val Ile Gly Tyr Thr Pro Val
 195 200 205
 Gln Leu Phe Phe Pro Glu Gln Gln Asn Phe Thr Leu Leu Lys Leu Gly
 210 215 220
 Asp Asn Val Thr Phe Glu Ser Lys Asp Ile Asn Glu Ile Glu Leu Gly
 225 230 235 240
 Asp Tyr Lys Thr Cys Gln Ser
 245

<210> 7378

<211> 580

<212> PRT

<213> S.epidermidis

<400> 7378

Arg Arg Gly Ile Thr Met Lys Glu Gln Asn Pro Leu Phe Phe Leu Phe
 1 5 10 15
 Lys Arg Leu Ser Trp Pro Tyr Gly Leu Ile Ile Ala Ala Val Ile Ile
 20 25 30
 Thr Ser Leu Gly Ser Leu Ser Gly Leu Leu Val Pro Leu Phe Thr Gly
 35 40 45
 Arg Leu Val Asp Lys Phe Ser Val Ser Ser Ile Asn Trp Gly Met Ile
 50 55 60
 Ala Ile Phe Gly Ser Ile Phe Leu Val Asn Ala Leu Leu Ser Gly Ile
 65 70 75 80
 Gly Leu Tyr Leu Leu Ser Lys Ile Gly Glu Lys Ile Ile Tyr Ala Ile
 85 90 95
 Arg Ser Leu Leu Trp Glu His Ile Ile Gln Leu Lys Met Pro Phe Phe
 100 105 110
 Asp Lys Asn Glu Ser Gly Gln Leu Met Ser Arg Leu Thr Asp Asp Thr
 115 120 125
 Lys Val Ile Asn Glu Phe Ile Ser Gln Lys Leu Pro Asn Leu Leu Pro
 130 135 140
 Ser Val Leu Thr Leu Ile Gly Ser Leu Val Met Leu Phe Ile Met Asp
 145 150 155 160
 Trp Lys Leu Thr Leu Leu Thr Phe Ile Thr Ile Pro Val Phe Ile Leu
 165 170 175
 Ile Ile Val Pro Leu Gly Arg Val Met Gln Lys Ile Ser Thr Asn Thr
 180 185 190
 Gln Ser Glu Ile Ala Asn Phe Ser Gly Leu Leu Gly Arg Val Leu Thr
 195 200 205
 Glu Met Arg Leu Val Lys Val Ser Asn Thr Glu Arg Leu Glu Leu Asp
 210 215 220
 Asn Ala His Thr Asn Leu Lys Lys Ile Tyr Arg Leu Gly Leu Lys Gln
 225 230 235 240
 Ala Lys Ile Ser Ala Val Val Gln Pro Ile Ser Gly Val Val Met Leu
 245 250 255
 Leu Thr Ile Ala Ile Ile Leu Gly Phe Gly Ala Leu Glu Ile Gly Thr
 260 265 270
 Gly Ala Ile Thr Pro Gly Thr Leu Ile Ala Met Ile Phe Tyr Val Ile
 275 280 285
 Gln Leu Ser Met Pro Leu Ile Asn Leu Ser Thr Leu Val Thr Asp Tyr
 290 295 300
 Lys Lys Ala Val Gly Ala Ser Ser Arg Ile Tyr Glu Ile Met Gln Glu

Gly Arg Phe Pro His Gln Lys Gly Phe Gly Arg Leu Thr Ala Glu Asp
 115 120 125
 Lys Lys Glu Ile Asp Trp Ala Leu Ser Val Thr Gly Thr Ser Glu Phe
 130 135 140
 Arg His Arg Thr Ile Asn Asp Leu Ser Gly Gly Gln Arg Gln Arg Val
 145 150 155 160
 Trp Ile Ala Met Ala Leu Ala Gln Arg Thr Asp Ile Ile Phe Leu Asp
 165 170 175
 Glu Pro Thr Thr Tyr Leu Asp Ile Cys His Gln Leu Glu Ile Leu Asn
 180 185 190
 Leu Val Lys Lys Leu Asn Glu Glu Gly Cys Thr Ile Val Met Val
 195 200 205
 Leu His Asp Ile Asn Gln Ala Ile Arg Phe Ser Asp His Leu Ile Thr
 210 215 220
 Met Lys Ala Gly Asp Ile Val Ala Thr Gly Gln Thr Asp Glu Val Leu
 225 230 235 240
 Thr Lys Asp Ile Leu Glu Lys Val Phe Asn Ile Asp Gly Val Leu Asp
 245 250 255
 Ile Asp Pro Arg Thr Gly Lys Pro Ile Leu Val Thr Tyr Asp Leu Phe
 260 265 270
 Cys Gln Thr Tyr Ser
 275

<210> 7380

<211> 151

<212> PRT

<213> S.epidermidis

<400> 7380

Asn Ile Ile Leu Asn Ile Lys Glu Lys Asn Lys Glu Met Gln Gln Ile
 1 5 10 15
 Tyr Pro Ser Val Thr His Pro Tyr Gln Phe Glu Leu Asn Lys Asp Phe
 20 25 30
 Asn Phe Ser Ala Ala His Tyr Ile Pro Phe Glu Glu Ala Gly Lys Cys
 35 40 45
 Ile Arg Thr His Gly His Thr Tyr Tyr Val Asn Leu Thr Ile Ala Gly
 50 55 60
 Asn Thr Leu Asp Lys Cys Gly Phe Leu Val Asn Phe Arg Asp Leu Lys
 65 70 75 80
 Lys Leu Val His Glu Gln Phe Asp His Tyr Leu Leu Asn Asp Leu Pro
 85 90 95
 Ala Phe Lys Asp Lys Ser Pro Ser Thr Glu Ile Val Ala Gln Thr Ile
 100 105 110
 Tyr His Ile Ile Gln Lys Glu Leu Asn Gln Arg Glu Asn Gln Pro Lys
 115 120 125
 Cys Val Gln Val Tyr Leu Arg Glu Thr Pro Ser Ser Tyr Val Val Tyr
 130 135 140
 Arg Pro Lys Glu Asp Gln Val
 145 150

<210> 7381

<211> 148

<212> PRT

<213> S.epidermidis

<400> 7381

3361

Leu Thr Ile Phe Lys Phe Lys Lys Met Gly Phe Lys Ile Tyr Gly Tyr
 1 5 10 15
 Asp Ile Asn Arg Glu Val Ser Leu Met Ala Ile Ser Lys Ile Asn Asp
 20 25 30
 Cys Phe Glu Leu Leu Ala Met Val Thr Tyr Ala Asp Arg Leu Lys Gly
 35 40 45
 Ile Ile Lys Lys Glu Phe Ser Ile Ser Phe Glu Glu Phe Ala Val Leu
 50 55 60
 Thr Tyr Ile Ser Glu Asn Lys Glu Glu Glu Tyr Tyr Leu Lys Asp Ile
 65 70 75 80
 Ile Asn His Leu Asn Tyr Lys Gln Pro Gln Val Val Lys Ala Val Lys
 85 90 95
 Asn Leu Ser Gln Glu Asn Tyr Phe Asn Lys Lys Arg Asn Glu His Asp
 100 105 110
 Glu Arg Thr Val Leu Ile Leu Val Asp Ser Lys Gln Arg Lys Lys Ile
 115 120 125
 Asp Asp Leu Leu Lys Arg Val Asn Asn Arg Ile Thr Glu Ala Asn Asn
 130 135 140
 Glu Asn Glu Val
 145

<210> 7382
 <211> 47
 <212> PRT
 <213> S.epidermidis

<400> 7382
 Ile Thr Ile Leu Asn Thr Pro Phe Asn Arg Lys Cys Leu Phe Cys Leu
 1 5 10 15
 Tyr Phe Asn Ile Lys Leu Thr Arg Tyr Glu Val Phe Asn Ser Thr His
 20 25 30
 Ile Ala Leu Phe Lys His Ile Phe Phe Phe Ile Phe Ile Ser Phe
 35 40 45

<210> 7383
 <211> 71
 <212> PRT
 <213> S.epidermidis

<400> 7383
 Leu Lys Ile Leu Lys Val Asn Tyr Gln Ala Asn Asn Pro Thr Asn Ala
 1 5 10 15
 Ala Val Ser Lys Asp Thr Lys Ile Pro Ala Asn Asn Ile Ile Gly Thr
 20 25 30
 Tyr Leu Glu Thr Lys Ser Asp Val Phe Leu Ser Thr Ile Pro Phe Asn
 35 40 45
 Val Pro Ile Ile Ile Pro Ile Val Glu Lys Phe Ala Lys Glu Thr Lys
 50 55 60
 Asn Val Asp Ile Thr Ala Leu
 65 70

<210> 7384
 <211> 291
 <212> PRT
 <213> S.epidermidis

CCCTGAGAGAG

<400> 7384

Cys Gly Ile Met Leu Leu Val Ile Asn Met Ile Glu Ile Gly Leu Thr
 1 5 10 15
 Gly Trp Gly Asp His Asp Thr Leu Tyr Glu Asp Leu Glu Arg Lys Thr
 20 25 30
 Asp Lys Leu Lys Thr Tyr Ala Ser His Phe Pro Ile Val Glu Leu Asp
 35 40 45
 Ala Ser Tyr Tyr Ala Ile Gln Pro Glu Arg Asn Ile Ile Lys Trp Ile
 50 55 60
 Asn Glu Thr Pro Asn Arg Phe Gln Phe Val Val Lys Ile His Gln Ala
 65 70 75 80
 Leu Thr Leu His Ala Asp Tyr Arg Asp Tyr Ala Glu Ser Arg Asp Ile
 85 90 95
 Leu Phe Lys Gln Phe Lys Glu Met Ile Asn Pro Leu Lys Glu His Asn
 100 105 110
 Lys Leu Ala Met Val Leu Val Gln Phe Pro Pro Trp Phe Asp Cys Asn
 115 120 125
 Val Gln Asn Ile Asn Tyr Ile Leu Tyr Val Arg Lys Gln Leu Thr Asp
 130 135 140
 Ile Pro Met Ser Ile Glu Phe Arg His Gln Ser Trp Phe Asp Asn Gln
 145 150 155 160
 Tyr Lys Glu Gln Thr Leu Ser Phe Leu Thr Gln His Gln Ile Ile His
 165 170 175
 Ala Val Val Asp Glu Pro Gln Val Lys Glu Gly Ser Val Pro Leu Val
 180 185 190
 Asn Arg Ile Thr Ser Glu Ile Ala Phe Val Arg Tyr His Gly Arg Asn
 195 200 205
 His Tyr Gly Trp Thr Lys Lys Asp Met Thr Asp Gln Glu Trp Arg Asp
 210 215 220
 Val Arg Tyr Leu Tyr Asp Tyr Ser Asn Asp Glu Leu Ala Asp Leu Ala
 225 230 235 240
 Arg Lys Val Glu Ile Leu Asn Gln Lys Ala Lys Lys Val Tyr Val Ile
 245 250 255
 Phe Asn Asn Asn Ser Gly Gly His Ala Ala Asn Asn Ala Lys Lys Tyr
 260 265 270
 Gln Asn Ile Leu Asp Ile Asp Tyr Glu Gly Leu Ala Pro Gln Gln Leu
 275 280 285
 Lys Leu Phe
 290

<210> 7385

<211> 42

<212> PRT

<213> S.epidermidis

<400> 7385

Trp Gln Val Met Ile Asn Thr Asp Ile Leu Leu His Leu Lys Asn Tyr
 1 5 10 15
 Gln Ile Asn Ile Asn His Ala Leu Ile Asn Glu Trp Lys Gly Val Val
 20 25 30
 Phe Tyr Ile Ser Phe Val Lys Met Ser Phe
 35 40

<210> 7386

<211> 79

<212> PRT

<213> S.epidermidis

<400> 7386

```

Gly Gly Tyr Ile Ser Met Ser Lys Thr Leu Glu Leu Val Phe Lys Ser
1          5          10          15
Asn Leu Asn Lys Pro Val Lys Leu Leu Leu Pro Asp Phe Asn Ala Ile
          20          25          30
Thr Thr Glu Gln Leu Ile Lys Glu Ser Met Asn Gln Leu Leu Glu Leu
          35          40          45
Asp Ile Leu Arg Phe Ser Leu Gly Lys Pro Val Lys Ile Tyr Ala Ala
          50          55          60
Gln Leu Ile Asp Lys Ser Thr Thr Val Ile Phe Glu Asp Lys Asn
65          70          75

```

<210> 7387

<211> 202

<212> PRT

<213> S.epidermidis

<400> 7387

```

Glu Phe Asn Met Ile Ile Tyr Ile Leu Ile Asn Ile Ala Ile Val Leu
1          5          10          15
Leu Ile Leu Gly Phe Asp Leu Tyr Arg His Arg Phe Arg Gln Leu Lys
          20          25          30
Phe Ser Ser Ile Leu Leu Ser Val Leu Ile Asn Ser Met Ile Asp Ile
          35          40          45
Phe Ala Ile Asn Gln Phe Asn Phe Ile Thr Met Phe Thr Val Thr Leu
          50          55          60
Phe Met Ile Trp Thr Leu Gln Ile Tyr Leu Asn Phe Lys Leu Tyr
65          70          75          80
Pro Phe Val Ile Ser Asp Gln Lys Phe Ile Ala Ile Ile Leu Ala Ile
          85          90          95
Val Ile Ser Leu Leu Gln Phe Ile Thr Asp Lys Ser Ser Thr Gln Ser
          100          105          110
Val Tyr Met Ser Ile Pro Tyr Leu Ser Pro Thr Ile Phe Ile Ile Gly
          115          120          125
Ala Ile Leu Leu Phe Val Gly Thr Phe Lys Ile Asp Glu Val Glu Arg
          130          135          140
Leu Ser Leu Phe Arg Lys Ile Lys Arg Pro Met Thr Thr Gly Thr Ile
145          150          155          160
Ile Ile Ile Leu Ser Leu Ile Ser Thr Met Ile Leu Thr Pro Phe Trp
          165          170          175
Tyr Val Phe Leu Ile Ile Tyr Ser Leu Leu Ile Gly Phe Ile Leu Trp
          180          185          190
Gln Gly Val Phe Phe Ile Lys Asp Lys Lys
          195          200

```

<210> 7388

<211> 359

<212> PRT

<213> S.epidermidis

<400> 7388

```

Phe Tyr Asp Ile Leu Lys Lys Leu Ser Tyr Lys Lys Leu Glu Lys Leu
1          5          10          15
Gln Thr Asn Thr His Leu Ser Tyr Leu Asn Gly Ile Lys Gly Ile Ile

```

20 25 30
 Thr Leu Lys Leu Asn Arg Arg Ile His Ala Trp Arg Arg Asp Met Glu
 35 40 45
 Asn Lys Pro Asp Tyr Phe His His Ile Glu His Arg Lys Phe Gln Ser
 50 55 60
 Ser Ser Lys Ile Thr Leu Trp Leu Ser Leu Val Ile Thr Met Ile Phe
 65 70 75 80
 Thr Val Val Glu Phe Val Gly Gly Ile Val Ser Asn Ser Leu Ala Leu
 85 90 95
 Leu Ser Asp Ser Phe His Met Leu Ser Asp Val Leu Ala Leu Gly Leu
 100 105 110
 Ser Met Val Ala Ile Tyr Phe Ser Ser Lys Pro Pro Thr Lys Asn Tyr
 115 120 125
 Thr Tyr Gly Phe Leu Arg Leu Glu Ile Ile Val Ala Phe Leu Asn Gly
 130 135 140
 Leu Ala Leu Ile Val Ile Ser Leu Gly Ile Met Tyr Glu Gly Ile Met
 145 150 155 160
 Arg Ile Ile His Pro Arg Pro Val Glu Ser Gly Ile Met Ile Leu Ile
 165 170 175
 Ala Phe Ile Gly Leu Ile Ala Asn Ile Val Leu Thr Ile Ile Leu Met
 180 185 190
 Ile Ser Leu Lys Lys Glu Asn Asn Ile Asn Ile Gln Ser Ala Leu Trp
 195 200 205
 His Phe Ile Gly Asp Leu Leu Asn Ser Leu Gly Ile Ile Val Ala Phe
 210 215 220
 Val Leu Ile His Phe Thr Gly Trp Asn Ile Val Asp Pro Ile Ile Ser
 225 230 235 240
 Ile Leu Ile Ser Leu Ile Ile Leu Arg Gly Gly Tyr Lys Ile Ile Lys
 245 250 255
 Asn Ala Ser Lys Val Leu Met Glu Arg Val Pro Asp Arg Tyr Asp Thr
 260 265 270
 Asp Glu Ile Met Gly Ala Met Lys Asp Val Glu Gly Val Ile Asp Ile
 275 280 285
 His Glu Phe His Leu Trp Ser Val Thr Thr Asn Gln Ser Ser Leu Ser
 290 295 300
 Ala His Val Val Leu Ser Asp Asp Tyr Ile Lys Ser Pro Tyr Ala Thr
 305 310 315 320
 Ile Asn Lys Val Ser Asp Leu Leu Lys Thr Gln Tyr Gly Leu Glu His
 325 330 335
 Val Thr Leu Gln Ile Glu Asn Ile Asn Leu Asn His Leu Asp Glu Glu
 340 345 350
 Tyr Phe Lys Gln Leu Gln Glu
 355

<210> 7389

<211> 425

<212> PRT

<213> S.epidermidis

<400> 7389

Leu Arg Asp Ile Met Lys Asn Thr Gln Lys Ile Cys Tyr Phe Phe Ser
 1 5 10 15
 Val Lys Ser Leu Leu Leu Arg Phe Ile Asp Tyr Ser His Thr Ser Phe
 20 25 30
 Ser Met Phe Lys Ile Ile Phe Gly Lys Glu Lys Asn Lys Val Val Lys
 35 40 45

Thr Met Lys Val Leu Val Ala Met Asp Glu Phe Asn Gly Ile Ile Ser
 50 55 60
 Ser Tyr Gln Ala Asn Arg Tyr Val Glu Glu Ala Val Ala Ser Gln Ile
 65 70 75 80
 Glu Asp Ala Asp Ile Val Gln Val Pro Leu Phe Asn Gly Arg His Glu
 85 90 95
 Leu Leu Asp Ser Val Phe Leu Trp Gln Ser Gly Asn Lys Tyr Arg Val
 100 105 110
 Ser Ala His Asp Ala Asp Met Lys Glu Thr Glu Ala Ile Tyr Gly Gln
 115 120 125
 Thr Asp Ser Gly Met Thr Ile Ile Glu Gly His Leu Phe Leu Asn Gly
 130 135 140
 Lys Lys Pro Ile Gln His Arg Ser Ser Tyr Gly Leu Gly Glu Val Ile
 145 150 155 160
 Lys Ala Ala Leu Asp Asn His Thr Glu His Leu Val Ile Ser Leu Gly
 165 170 175
 Gly Ile Gly Ser Phe Asp Gly Gly Ala Gly Met Leu Gln Ala Leu Gly
 180 185 190
 Ala Thr Phe Tyr Asp Asp Glu Ala Gln Ile Val Asp Met Arg Lys Gly
 195 200 205
 Ala Tyr Leu Ile Lys Tyr Ile Arg Arg Ile Asp Leu Ser Gly Val His
 210 215 220
 Pro Gln Leu Thr Lys Val Asn Ile Gln Leu Met Ser Asp Phe Ser Ser
 225 230 235 240
 Arg Leu Tyr Gly Lys Lys Ser Glu Ile Met Gln Thr Tyr Glu Ser Leu
 245 250 255
 Asp Leu Ser Gln Asn Glu Ala Ala Glu Ile Asp Asn Leu Ile Trp Tyr
 260 265 270
 Phe Ser Glu Leu Phe Lys Asn Glu Leu Lys Ile Ala Met Gly Pro Ile
 275 280 285
 Glu Arg Gly Gly Ala Gly Gly Gly Ile Ala Ala Val Leu Asn Ser Leu
 290 295 300
 Tyr Gln Ala Glu Ile Leu Thr Ser His Glu Leu Val Asn Gln Ile Thr
 305 310 315 320
 His Leu Glu Asn Leu Ile Gln Gln Ala Asp Leu Ile Ile Phe Gly Glu
 325 330 335
 Gly Leu Lys Glu Glu Asp Gln Ile Leu Glu Thr Thr Thr Ile Arg Ile
 340 345 350
 Ala Glu Leu Thr Gln Gln Tyr Ser Lys Pro Ala Ile Ala Ile Cys Ala
 355 360 365
 Thr Asn Asp Lys Phe Asp Leu Phe Glu Ser Leu Asn Val Thr Ala Met
 370 375 380
 Phe Asn Thr Phe Ile Asp Met Pro Asp Ser Tyr Thr Asp Phe Lys Met
 385 390 395 400
 Gly Ile Gln Ile Arg His Tyr Thr Val Gln Ala Leu Lys Leu Leu Lys
 405 410 415
 Thr Gln Ile Asn Leu Pro Leu Ser Ser
 420 425

<210> 7390

<211> 74

<212> PRT

<213> S.epidermidis

<400> 7390

Ile Tyr Cys Ile Ile Thr Ser Tyr Ile Phe Glu Leu Phe Leu Asn Tyr

1		5		10		15									
Phe	Asn	Phe	Lys	Ile	Lys	Phe	Ile	Leu	Phe	Asn	Tyr	Lys	Asn	Ala	Pro
		20						25					30		
Gln	Lys	Leu	Lys	Phe	Ser	Leu	Ala	Phe	Gly	Val	His	Asn	Ile	Val	Leu
		35					40					45			
Ser	Ile	Leu	Ile	Cys	Phe	Gln	Ser	Met	Thr	Gly	Leu	Lys	Met	Tyr	Leu
	50					55					60				
Cys	Gln	Ala	Tyr	Tyr	Ile	Asn	Asn	Ser	Glu						
65					70										

<210> 7391

<211> 313

<212> PRT

<213> S.epidermidis

<400> 7391

Gly	Glu	Cys	Met	Leu	Thr	Thr	Asp	Arg	Leu	Val	Asn	Thr	Leu	Asn	Leu
1				5					10					15	
Glu	Leu	Leu	Thr	Gly	Glu	Glu	Gly	Leu	Asp	Arg	Pro	Ile	Lys	Asn	Thr
			20					25					30		
Asp	Ile	Ser	Arg	Pro	Gly	Leu	Glu	Met	Ala	Gly	Tyr	Phe	Ser	His	Tyr
		35					40					45			
Ala	Ser	Asp	Arg	Ile	Gln	Leu	Leu	Gly	Thr	Thr	Glu	Leu	Ser	Phe	Tyr
	50					55					60				
Asn	Leu	Leu	Pro	Asp	Glu	Glu	Lys	Lys	Gly	Arg	Met	Arg	Lys	Leu	Cys
65				70					75					80	
Arg	Pro	Glu	Thr	Pro	Ala	Ile	Ile	Val	Thr	Arg	Gly	Leu	Glu	Pro	Pro
			85						90					95	
Glu	Glu	Leu	Ile	Gln	Ala	Ser	Gln	Glu	Thr	His	Thr	Pro	Ile	Ile	Val
			100					105					110		
Ala	Lys	Asp	Ala	Thr	Thr	Ser	Leu	Met	Ser	Arg	Leu	Thr	Thr	Phe	Leu
		115					120					125			
Glu	His	Glu	Leu	Ala	Lys	Thr	Thr	Ser	Leu	His	Gly	Val	Leu	Val	Asp
	130					135					140				
Val	Tyr	Gly	Val	Gly	Val	Leu	Ile	Thr	Gly	Asp	Ser	Gly	Ile	Gly	Lys
145					150				155					160	
Ser	Glu	Thr	Ala	Leu	Glu	Leu	Val	Lys	Arg	Gly	His	Arg	Leu	Val	Ala
			165					170					175		
Asp	Asp	Asn	Val	Glu	Ile	Lys	Glu	Ile	Thr	Lys	Asp	Glu	Leu	Val	Gly
		180					185					190			
Lys	Pro	Pro	Lys	Leu	Ile	Glu	His	Leu	Leu	Glu	Ile	Arg	Gly	Leu	Gly
		195				200						205			
Ile	Ile	Asn	Val	Met	Thr	Leu	Phe	Gly	Ala	Gly	Ser	Ile	Leu	Thr	Glu
	210				215						220				
Lys	Gln	Ile	Arg	Leu	Asn	Ile	Asn	Leu	Glu	Asn	Trp	Asn	Lys	Asn	Lys
225				230					235					240	
Leu	Tyr	Asp	Arg	Val	Gly	Leu	Asn	Glu	Glu	Thr	Leu	Lys	Ile	Leu	Asp
			245					250					255		
Thr	Glu	Ile	Thr	Lys	Lys	Thr	Ile	Pro	Val	Arg	Pro	Gly	Arg	Asn	Val
		260					265					270			
Ala	Val	Ile	Ile	Glu	Val	Ala	Ala	Met	Asn	Tyr	Arg	Leu	Asn	Ile	Met
		275				280						285			
Gly	Ile	Asn	Thr	Ala	Val	Glu	Phe	Asn	Glu	Arg	Leu	Asn	Glu	Glu	Ile
	290				295						300				
Val	Arg	Asn	Ser	His	Lys	Ser	Glu	Glu							
305					310										

<210> 7392
 <211> 98
 <212> PRT
 <213> S.epidermidis

<400> 7392

```

Pro Pro Gly Ile Pro Arg Ser Ile Met Thr Val Phe Lys Leu Ala Arg
1      5      10      15
Asp Ala Tyr Thr Ala Ala Val Ile Pro Ala Gly Pro Ala Pro Ile Ile
      20      25      30
Ala Thr Ser Thr Ser Thr Ser Val Ile Leu Asn Ala Ser Tyr Leu Leu
      35      40      45
Ile Ile Met Arg Ile Ile Tyr His Thr Phe His Phe Ile Asn Leu Tyr
      50      55      60
Ala Gln Tyr Lys Phe Asn Cys Phe Ile Gln Phe Val Ser Arg Asn Ile
65      70      75      80
Lys Ile Val His Gln Leu Pro Leu Gly Lys Trp Leu Ala Arg Thr Thr
      85      90      95
Ile Arg

```

<210> 7393
 <211> 109
 <212> PRT
 <213> S.epidermidis

<400> 7393

```

Gly Ile Leu Met Thr Lys Ile Ser Val Val Val Tyr Gly Ala Glu Val
1      5      10      15
Val Cys Ala Ser Cys Val Asn Ala Pro Thr Ser Ile Asp Thr Tyr Gln
      20      25      30
Trp Leu Gln Ala Leu Leu Leu Arg Lys Phe Pro Gln His His Phe Glu
      35      40      45
Phe Thr Tyr Ile Asp Ile Arg Asn Asp Thr Glu Asn Leu Thr Asp His
      50      55      60
Asp Met Gln Phe Ile Glu Arg Ile Asn Glu Asp Glu Leu Phe Tyr Pro
65      70      75      80
Leu Val Thr Met Asn Asp Glu Tyr Val Ala Asp Gly Tyr Ile Gln Tyr
      85      90      95
Lys Gln Ile Thr Arg Phe Ile Lys Ser Tyr Phe Thr Met
      100      105

```

<210> 7394
 <211> 110
 <212> PRT
 <213> S.epidermidis

<400> 7394

```

Met Asn Leu Ile Pro Thr Val Ile Glu Thr Thr Asn Arg Gly Glu Arg
1      5      10      15
Ala Tyr Asp Ile Tyr Ser Arg Leu Leu Lys Asp Arg Ile Ile Met Leu
      20      25      30
Gly Ser Gln Ile Asp Asp Asn Val Ala Asn Ser Ile Val Ser Gln Leu
      35      40      45
Leu Phe Leu Gln Ala Gln Asp Ser Glu Lys Asp Ile Tyr Leu Tyr Ile

```

50		55		60
Asn Ser Pro Gly Gly Ser Val Thr Ala Gly Phe Ala Ile Tyr Asp Thr				
65		70		75
Ile Gln His Ile Lys Pro Asp Val Gln Thr Ile Cys Ile Gly Met Ala				
	85		90	95
Ala Ser Met Gly Ser Phe Leu Leu Ala Ala Gly Ala Lys Arg				
	100		105	110

<210> 7395

<211> 101

<212> PRT

<213> S.epidermidis

<400> 7395

Ser Asp Leu Ile Lys Tyr Leu Asp Gln Ile Tyr Glu Ile Lys Ser Asp		
1	5	10
Ile Ile Ile Ile Lys Ile Ile Asp Lys His Gln Phe Ser Leu Ala Glu		
	20	25
Ser Thr Lys Ser Leu Asn His Leu Ile Phe Leu Phe Leu Tyr Ile Tyr		
	35	40
Ala Tyr Ile Ile Ile Ala Arg Ser Ile Ile Ile Phe Ile Asn Leu Met		
	50	55
Leu Leu Leu Ser Thr Phe Phe Asn Phe Ser Val Gly Leu Gln Lys Ser		
65	70	75
Ile Asn Thr Val Tyr Glu Leu Ser Asn Ile Tyr Val Lys Asn Lys Gly		
	85	90
Ile Ile Lys Lys Arg		95
	100	

<210> 7396

<211> 56

<212> PRT

<213> S.epidermidis

<400> 7396

Gly Lys Leu Ile Thr Phe Ala Ile Lys Tyr Tyr Gln Pro Glu Ser Asp		
1	5	10
Asp Val Leu Val Gly Leu Phe Tyr Phe Ile Ile Glu Thr Ile Met Phe		
	20	25
Leu Asn His Met Leu Lys Gly Ile Met Ile Tyr Gln Val Asn Leu Ile		
	35	40
Ile Met Lys Arg Phe Leu Asn Ile		45
	50	55

<210> 7397

<211> 150

<212> PRT

<213> S.epidermidis

<400> 7397

Ser Phe Leu Ile Tyr Phe Trp Leu Asn Gln Trp Leu Thr Lys Glu Gly		
1	5	10
Asp Ser Met Lys Val Val Tyr Tyr Ser Phe Ser Gly Asn Val Arg Arg		
	20	25
Phe Ile Ser Arg Ala Gly Ile Lys Asp Thr Phe Glu Ile Thr Gln Asp		
	35	40
		45

```

Asn Cys Asn Glu Ser Val Asn Glu Pro Tyr Ile Leu Val Thr Gly Thr
 50      55      60
Ile Gly Phe Gly Glu Val Pro Gln Pro Val Gln Ser Phe Leu Asn Val
65      70      75      80
Asn His Thr Gln Leu Gln Ala Val Ala Ala Ser Gly Asn Arg Asn Trp
      85      90      95
Gly Gln Asn Phe Ala Lys Ala Gly His Thr Ile Ser Glu Glu Tyr Lys
      100      105      110
Val Pro Leu Met Met Lys Phe Glu Val Gln Gly Thr Asn Lys Asp Ile
      115      120      125
Ile Glu Phe Lys Asp Lys Val Gly Asn Phe Asn Glu Asn His Gly Arg
      130      135      140
Lys Glu Ile Gln Ser Tyr
145      150

```

<210> 7398

<211> 117

<212> PRT

<213> S.epidermidis

<400> 7398

```

Leu Leu Leu Ile Ala Arg Asn Phe Ser Phe Ile Lys Gln Leu Tyr Thr
1      5      10      15
Thr Tyr Leu Lys Asn Asn Gln Phe Val Gln Leu Lys Met Glu Leu Asn
      20      25      30
Gly Tyr Arg Asp Ala Leu Tyr Gly Gly Gly Lys Ser Ala Lys Ser Leu
      35      40      45
Met Thr Lys Lys Asp Ile Lys Met Ser Asn Lys Ile Ala Asn Ala Met
      50      55      60
Lys Arg Leu Glu Lys Val Ile Asp Asn Ser His Glu Lys Ile Asp Ala
65      70      75      80
Arg Ala Ile Arg Glu Tyr Val Asn Lys Tyr Pro Ile Ile Glu Gly Gln
      85      90      95
Val Ile His Ile Asn Ser Cys Leu Asp Asn Asp Ile Ser Gly Thr Tyr
      100      105      110
Ile Tyr Tyr Ser Ala
      115

```

<210> 7399

<211> 55

<212> PRT

<213> S.epidermidis

<400> 7399

```

Lys Gln Ile Ile Phe Asn Ser Leu Lys Asn Ser Thr Arg Ser Leu Asp
1      5      10      15
Ile Ile Lys Lys Val Gly Leu Arg Ile His Leu Glu Ser Ile Val Leu
      20      25      30
Pro His Asn Val Asn Ile Ala Tyr Ile Lys Phe Glu Ile Phe Leu Thr
      35      40      45
Asn Asn Tyr Tyr Asn Phe Phe
      50      55

```

<210> 7400

<211> 175

<212> PRT

<213> S.epidermidis

<400> 7404

Gly Lys Thr Met Ser Asn His Asn Tyr Ser Asp Glu Lys Ile Glu Val
 1 5 10 15
 Ile Asp Pro Ser Asp Asp Arg Tyr Lys Gly Asp Asp Tyr Phe Asn Lys
 20 25 30
 Asn Ser Ser Gln Asn Asn Gln Asn Leu Lys Thr Phe Asn Gln Thr Tyr
 35 40 45
 Ser Tyr Gly Cys Thr His Ser Gly Cys Gly Cys Ile Leu Gly Cys Leu
 50 55 60
 Thr Ile Ser Leu Ile Ser Phe Leu Leu Ser Leu Ile Phe Trp Ile
 65 70 75 80
 Ile

<210> 7405

<211> 216

<212> PRT

<213> S.epidermidis

<400> 7405

Leu Met Thr Ile Ala Gln Asn Gly Gly Phe Leu Met Phe Ser Lys Lys
 1 5 10 15
 Lys Asp Lys Phe Met Val Gln Leu Glu Glu Met Val Phe Asn Leu Asp
 20 25 30
 Arg Ala Ala Ile Glu Phe Gly Lys Met Asp Phe Asn Thr His Leu Asp
 35 40 45
 Leu Lys Ala Tyr Ser Asp Asn Ile Lys Thr Tyr Glu Ser His Gly Asp
 50 55 60
 Glu Leu Met His Gln Val Ile Ser Asp Leu Asn Gln Thr Phe Ile Thr
 65 70 75 80
 Pro Ile Glu Arg Glu Asp Ile Leu Ser Leu Cys Asn Ala Ile Asp Asp
 85 90 95
 Val Leu Asp Ala Met Glu Glu Thr Ser Ala Met Phe Glu Met Tyr Ser
 100 105 110
 Ile Glu Tyr Thr Asp Glu Tyr Met Ala Glu Phe Val Glu Asn Ile Gln
 115 120 125
 Lys Ala Val Ala Glu Met Lys Leu Ala Val Gly Leu Leu Val Asp Lys
 130 135 140
 Lys Leu Ser His Met Arg Ile His Ser Ile Asn Ile Lys Glu Phe Glu
 145 150 155 160
 Thr Asn Cys Asp Gly Ile Leu Arg Gln Ser Met Lys His Ile Phe Asn
 165 170 175
 Ser Glu Thr Asp Pro Ile Thr Leu Ile Lys Ile Lys Asp Ile Tyr Gln
 180 185 190
 Ser Met Glu Ile Ala Asp Lys Cys Gln Ala Val Ala Asn Asn Phe
 195 200 205
 Glu Thr Ile Ile Met Lys Asn Ser
 210 215

<210> 7406

<211> 237

<212> PRT

<213> S.epidermidis

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 996
 997
 998
 999
 1000
 1001
 1002
 1003
 1004
 1005
 1006
 1007
 1008
 1009
 1010
 1011
 1012
 1013
 1014
 1015
 1016
 1017
 1018
 1019
 1020
 1021
 1022
 1023
 1024
 1025
 1026
 1027
 1028
 1029
 1030
 1031
 1032
 1033
 1034
 1035
 1036
 1037
 1038
 1039
 1040
 1041
 1042
 1043
 1044
 1045
 1046
 1047
 1048
 1049
 1050
 1051
 1052
 1053
 1054
 1055
 1056
 1057
 1058
 1059
 1060
 1061
 1062
 1063
 1064
 1065
 1066
 1067
 1068
 1069
 1070
 1071
 1072
 1073
 1074
 1075
 1076
 1077
 1078
 1079
 1080
 1081
 1082
 1083
 1084
 1085
 1086
 1087
 1088
 1089
 1090
 1091
 1092
 1093
 1094
 1095
 1096
 1097
 1098
 1099
 1100
 1101
 1102
 1103
 1104
 1105
 1106
 1107
 1108
 1109
 1110
 1111
 1112
 1113
 1114
 1115
 1116
 1117
 1118
 1119
 1120
 1121
 1122
 1123
 1124
 1125
 1126
 1127
 1128
 1129
 1130
 1131
 1132
 1133
 1134
 1135
 1136
 1137
 1138
 1139
 1140
 1141
 1142
 1143
 1144
 1145
 1146
 1147
 1148
 1149
 1150
 1151
 1152
 1153
 1154
 1155
 1156
 1157
 1158
 1159
 1160
 1161
 1162
 1163
 1164
 1165
 1166
 1167
 1168
 1169
 1170
 1171
 1172
 1173
 1174
 1175
 1176
 1177
 1178
 1179
 1180
 1181
 1182
 1183
 1184
 1185
 1186
 1187
 1188
 1189
 1190
 1191
 1192
 1193
 1194
 1195
 1196
 1197
 1198
 1199
 1200
 1201
 1202
 1203
 1204
 1205
 1206
 1207
 1208
 1209
 1210
 1211
 1212
 1213
 1214
 1215
 1216
 1217
 1218
 1219
 1220
 1221
 1222
 1223
 1224
 1225
 1226
 1227
 1228
 1229
 1230
 1231
 1232
 1233
 1234
 1235
 1236
 1237
 1238
 1239
 1240
 1241
 1242
 1243
 1244
 1245
 1246
 1247
 1248
 1249
 1250
 1251
 1252
 1253
 1254
 1255
 1256
 1257
 1258
 1259
 1260
 1261
 1262
 1263
 1264
 1265
 1266
 1267
 1268
 1269
 1270
 1271
 1272
 1273
 1274
 1275
 1276
 1277
 1278
 1279
 1280
 1281
 1282
 1283
 1284
 1285
 1286
 1287
 1288
 1289
 1290
 1291
 1292
 1293
 1294
 1295
 1296
 1297
 1298
 1299
 1300
 1301
 1302
 1303
 1304
 1305
 1306
 1307
 1308
 1309
 1310
 1311
 1312
 1313
 1314
 1315
 1316
 1317
 1318
 1319
 1320
 1321
 1322
 1323
 1324
 1325
 1326
 1327
 1328
 1329
 1330
 1331
 1332
 1333
 1334
 1335
 1336
 1337
 1338
 1339
 1340
 1341
 1342
 1343
 1344
 1345
 1346
 1347
 1348

<400> 7406

```

Met Ala Lys Ile Pro Val Leu Glu Ile Phe Gly Pro Thr Ile Gln Gly
1          5          10          15
Glu Gly Arg Val Ile Gly Arg Lys Thr Met Phe Val Arg Thr Ala Gly
20          25          30
Cys Asp Tyr Arg Cys Ser Trp Cys Asp Ser Ala Phe Thr Trp Asp Gly
35          40          45
Ser Ala Lys Glu Asp Ile Lys Leu Met Thr Ala Glu Glu Ile Tyr Asp
50          55          60
Ala Leu Leu Glu Ile Gly Gly His Arg Phe Asn His Val Thr Ile Ser
65          70          75          80
Gly Gly Asn Pro Ala Leu Ile Lys Gly Ile Gln Glu Leu Val Asp Leu
85          90          95
Phe Glu Asp Lys His Ile Tyr Thr Ala Leu Glu Thr Gln Gly Ser Arg
100         105         110
Phe Gln Ser Trp Met Thr Gln Ile Asp Asp Leu Thr Ile Ser Pro Lys
115         120         125
Pro Pro Ser Ser Gly Met Lys Thr Asn Leu Glu Ile Leu Asp Ser Val
130         135         140
Ile Asn Gln Cys Thr Phe His Ser Leu Asn Leu Lys Val Val Ile Phe
145         150         155         160
Asp Asp Ala Asp Tyr Asp Phe Ala Lys Leu Ile His His Arg Tyr Pro
165         170         175
Asn Ile Pro Phe Tyr Leu Gln Val Gly Asn Pro Tyr Leu Asp Asp Asn
180         185         190
Val Asp Gln His Thr Asp Lys Leu Leu Glu Arg Tyr Glu Gln Leu Val
195         200         205
Asp Arg Val Met Gln Ser Ser Asp Met Asn His Val Tyr Val Leu Pro
210         215         220
Gln Leu His Thr Leu Leu Trp Ser Asn Lys Lys Gly Val
225         230         235

```

<210> 7407

<211> 305

<212> PRT

<213> S.epidermidis

<400> 7407

```

Leu Lys Lys Met Thr Ser Asn Glu Lys Glu Met Gly Lys Ser Glu Leu
1          5          10          15
Leu Val Val Thr Gly Met Ser Gly Ala Gly Lys Ser Leu Val Ile Gln
20          25          30
Ser Leu Glu Asp Met Gly Phe Phe Cys Val Asp Asn Leu Pro Pro Val
35          40          45
Leu Leu Pro Lys Phe Val Glu Leu Met Ala Gln Gly Asn Pro Ser Leu
50          55          60
Gln Lys Val Ala Ile Ala Ile Asp Leu Arg Gly Lys Glu Leu Phe Lys
65          70          75          80
Ser Leu Val Lys Glu Ile Asp Ile Ile Lys Ser Arg Asn Asp Val Ile
85          90          95
Leu Asp Val Met Phe Leu Glu Ala Lys Thr Glu Lys Ile Ile Ser Arg
100         105         110
Tyr Lys Glu Ser Arg Arg Ala His Pro Leu Asn Glu Gln Gly Gln Arg
115         120         125
Ser Leu Ile Asp Ala Ile Asn Glu Glu Arg Glu His Leu Ser Glu Ile
130         135         140

```

Arg Ser Ile Ala Asn Tyr Val Ile Asp Thr Thr Lys Leu Lys Pro Lys
 145 150 155 160
 Glu Leu Lys Gln Arg Ile Ser Lys Phe Tyr Leu Asp Glu Asn Phe Glu
 165 170 175
 Thr Phe Thr Ile Asn Val Thr Ser Phe Gly Phe Lys His Gly Ile Gln
 180 185 190
 Met Asp Ala Asp Leu Val Phe Asp Val Arg Phe Leu Pro Asn Pro Tyr
 195 200 205
 Tyr Val Glu Glu Leu Arg Pro Phe Thr Gly Leu Asp Glu Pro Val Tyr
 210 215 220
 Asn Tyr Val Met Lys Trp Lys Glu Thr Gln Ile Phe Phe Asp Lys Leu
 225 230 235 240
 Thr Asp Leu Leu Lys Phe Met Ile Pro Gly Tyr Lys Lys Glu Gly Lys
 245 250 255
 Ser Gln Leu Val Ile Ala Ile Gly Cys Thr Gly Gly Gln His Arg Ser
 260 265 270
 Val Ala Leu Ala Lys Arg Leu Ala Glu Tyr Leu Asn Glu Ile Phe Glu
 275 280 285
 Tyr Asn Val Tyr Val His His Arg Asp Ala His Ile Glu Ser Gly Gly
 290 295 300

Arg
305

<210> 7408

<211> 358

<212> PRT

<213> S.epidermidis

<400> 7408

Val Gly Glu Ile Met Lys Leu Ala Ile Ile Ile Pro Val Tyr Asn Ala
 1 5 10 15
 Glu Glu Thr Ile Lys Arg Ala Ile Leu Ser Val Asp Thr Ser Val Pro
 20 25 30
 Tyr Glu Ile Ile Cys Ile Asn Asp Gly Ser Thr Asp Gln Thr Gln His
 35 40 45
 Val Leu Thr Glu Leu Gln Gln Lys His Pro His Ile Lys Val Ile His
 50 55 60
 Gln Ser Asn Gln Gly Ala Ala Arg Ser Arg Asn Val Gly Leu Glu Ala
 65 70 75 80
 Met Ser Glu Asp Val Asp Ala Phe Leu Phe Leu Asp Ala Asp Asp Glu
 85 90 95
 Phe Leu Pro Ser Arg Ile Asp Leu Met Val Asn Ala Phe Asn Lys Asn
 100 105 110
 Lys Glu Thr Asp Val Val Ile Gly Gln Met Ala Arg Asp Val Asn Gly
 115 120 125
 Glu Trp Gln Val Ile Ser Thr His Gln Ser Met Val Lys Asp Ala Ile
 130 135 140
 Val Thr Leu Asp Arg Lys Pro Asp Ile Leu Gln Ser Ile Gly Pro Gly
 145 150 155 160
 Ala Lys Leu Phe Ser Ser Lys Tyr Ala Gly Leu Arg Phe Asp Glu Asp
 165 170 175
 Val Val Phe Cys Glu Glu His Thr Phe Ile Val Lys Ala Phe Ser Lys
 180 185 190
 Ala Arg Asp Ile Gln Leu Ile Pro Asn Ile Val Tyr Gly Tyr Asn Glu
 195 200 205
 Arg Glu Gly Ser Val Thr Ala Gln Arg Ala Asp Thr Phe Leu Pro Tyr

210		215		220
Met Ser Asp Ala Leu Lys Val Arg Gln Arg Val Met Glu Leu Leu Leu				
225		230		240
Leu Leu Asp Glu Lys Ile Tyr Tyr Ser Tyr Arg Met Asp Asn Leu Ile				
	245		250	255
Val Ser Tyr Leu Ile Gln Ala His Leu Lys Lys Asn Asn Lys Ile Thr				
	260		265	270
Gln Ser Leu Leu Glu Ser Val Ile Ala Tyr Met Lys Ala Met Gln His				
	275		280	285
Thr His Tyr Ser Gly Glu Ala Met Phe Arg Ile Val Arg Ala Val Glu				
	290		295	300
Gln Ser Ala Thr His Trp Thr Lys Pro Leu Tyr Leu Gln Trp Lys Lys				
305		310		320
Ala Leu Ser Glu Val Gly Ile Gly Arg Pro Gly Leu Ile Arg Phe Lys				
	325		330	335
Leu Gln Val Ile Pro Lys Lys Ile Ser Phe Ser Gly Lys Glu Ser Leu				
	340		345	350
Lys Arg Ile Phe Lys Lys				
355				

<210> 7409

<211> 68

<212> PRT

<213> S.epidermidis

<400> 7409

Leu Lys Glu Ile Arg Gly Ser Leu Met Ile Tyr Leu Gln Asn Phe Ile		
1	5	10
Thr Thr Thr Ile Gln Leu Asn Ile Tyr Leu Ile Leu Val Ile Gly Leu		
	20	25
Leu Tyr Val Ile Ile His Tyr Tyr Arg Asn Lys Gly Val Asn Ala Phe		
	35	40
Leu Asp Ile Tyr Leu Asn Tyr Ile Pro Gly Thr Tyr Ser Arg Ile Trp		
	50	55
Pro Arg Leu Ile		60
65		

<210> 7410

<211> 168

<212> PRT

<213> S.epidermidis

<400> 7410

Ile Ile Leu Ile Ile Gln Lys Val Thr Val Pro Leu Ile Leu Glu Leu		
1	5	10
Leu Asn Gly Glu Ser Leu Arg Gln Tyr Ile Gln Ser Ala Tyr His Glu		
	20	25
Thr Leu Lys Glu Glu Phe Lys Asn Leu Thr Pro Tyr Met Thr Lys Leu		
	35	40
Ala Lys Val His Gly Arg Ser His Pro Tyr Leu Leu Lys Leu Gln Asp		
	50	55
Leu Tyr Arg Glu Phe Gly Asp Ser Met Leu Asp His Ile Arg Lys Glu		
65	70	75
Asp Glu Glu Asp Phe Pro Lys Leu Ile Gln Tyr Ser Gln Gly Gln Asp		
	85	90
Val Gln Asn Ile Lys Ile Ile Leu Glu Asp Leu Ile Asn Asp His Glu		
		95

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851

	100		105		110										
Asp	Thr	Gly	Gln	Leu	Leu	Asn	Val	Met	Asn	Gln	Leu	Thr	Ser	Asp	Tyr
	115						120					125			
Gln	Thr	Pro	Glu	Glu	Ala	Cys	Gly	Thr	Trp	Lys	Leu	Val	Tyr	Gln	Arg
	130						135					140			
Leu	Gln	Asn	Ile	Glu	Arg	Gln	Thr	His	Gln	His	Val	His	Leu	Glu	Asn
145					150					155					160
His	Val	Leu	Phe	Lys	Lys	Val	Ser								
				165											

<210> 7411

<211> 91

<212> PRT

<213> S.epidermidis

<400> 7411

Gly	Arg	Met	Ile	Asn	Ala	Val	Val	Ile	Ala	Val	Ile	Leu	Met	Ile	Ile
1			5						10					15	
Leu	Cys	Leu	Cys	Arg	Leu	Asn	Val	Val	Ile	Ser	Leu	Phe	Ile	Ser	Ala
			20					25					30		
Leu	Val	Gly	Gly	Leu	Ile	Ser	Gly	Met	Asn	Leu	Glu	Lys	Val	Ile	Asn
		35					40					45			
Val	Phe	Gly	Lys	Asn	Ile	Val	Asp	Gly	Ala	Glu	Val	Ala	Leu	Ser	Tyr
	50				55						60				
Ala	Leu	Leu	Gly	Gly	Phe	Ala	Ala	Leu	Ile	Ser	Tyr	Ser	Arg	Ile	Thr
65					70					75					80
Asp	Tyr	Leu	Ile	Val	Ser	Tyr	Thr	Thr	Gly	Asn					
				85					90						

<210> 7412

<211> 91

<212> PRT

<213> S.epidermidis

<400> 7412

Cys	Leu	Val	Ile	Arg	Ser	Ala	Asn	Met	Lys	Lys	Leu	Leu	Phe	Ile	Ile
1			5						10					15	
Thr	Val	Ile	Ile	Leu	Thr	Ile	Val	Val	Ser	Ala	Cys	Gly	Asn	Glu	Ser
			20					25					30		
Lys	Arg	Asp	Ile	Lys	Gln	Phe	Glu	Arg	Gln	Tyr	Glu	Glu	Ile	His	Gln
		35					40					45			
Lys	Gln	His	Ser	Val	Glu	Lys	Val	Met	Asp	Lys	Ile	Pro	Leu	Lys	Glu
	50					55					60				
Leu	Asp	Asn	Leu	Ser	Lys	Thr	Asp	Thr	Thr	Asp	Lys	Asn	Lys	Lys	Glu
65					70					75					80
Phe	Val	His	Phe	Asn	Arg	Ile	Leu	Ile	Thr	Ile					
				85					90						

<210> 7413

<211> 355

<212> PRT

<213> S.epidermidis

<400> 7413

Lys	Glu	Pro	Ile	Thr	Ile	Phe	Ser	Ile	Arg	Ser	Gln	Ile	Ile	Ile	Gly
1				5					10					15	

Val Ile Ser Ser Val Ile Leu Thr Thr Ile Ile Leu Val Ile Ala Tyr
 20 25 30
 Lys Leu Met Trp Phe Asn Gly His Met Thr Leu Thr Leu Ala Ile Thr
 35 40 45
 Thr Met Ile Thr Ser Cys Leu Thr Leu Ser Ile Cys Ser Ile Phe Ile
 50 55 60
 Asn Pro Leu Ile Gln Lys Ile Lys Gln Phe Asn Ile Lys Thr Lys Gln
 65 70 75 80
 Phe Ile Asn His Glu Lys Phe Ile Asp Asp Glu Thr Phe Gln Ser Pro
 85 90 95
 Arg Glu Ile Lys Glu Leu Asn Asp Ser Phe Asn Lys Met Ala Tyr Glu
 100 105 110
 Ile Asn Asn Gln Met Asn Met Ile Lys Asn Glu Gln Gln Glu Lys Thr
 115 120 125
 Glu Ile Ile Gln Asn Leu Ala His Asp Leu Lys Thr Pro Leu Ala Gly
 130 135 140
 Ile Arg Ser Tyr Ser Glu Gly Leu Arg Asp Gly Val Ile Ser Asp Pro
 145 150 155 160
 Gln Glu Val His Glu Ala Tyr Glu Ile Leu Ile Lys Gln Ala Asn Arg
 165 170 175
 Leu Ser Ile Leu Phe Asp Asp Ile Thr His Val Ile Asn Leu Asn Thr
 180 185 190
 Gly Arg Ser Tyr Pro Leu Glu Leu Ile Gln Leu Asp Gln Leu Leu Val
 195 200 205
 Asn Ile Leu Gln Pro Tyr Glu Gln His Ile Lys Gln Glu Asn Arg Thr
 210 215 220
 Leu Glu Val Asn Phe Cys Thr Asp Ile Asp Ala Phe Tyr Gln Tyr Arg
 225 230 235 240
 Pro Pro Ile Glu Arg Ile Leu Thr Asn Leu Leu Asp Asn Ala Leu Lys
 245 250 255
 Phe Ser Asn Ser Gly Ser Arg Ile Asp Ile Ile Ser Glu Cys Lys
 260 265 270
 Glu Asn Asp Val Ile Ser Ile Ser Ile Lys Asp Glu Gly Ile Gly Ile
 275 280 285
 Val Pro Glu Leu Gln Ser Arg Ile Phe Glu Arg Thr Phe Arg Val Glu
 290 295 300
 Asp Ser Arg Asn Thr Lys Thr Gly Gly Ser Gly Leu Gly Leu Tyr Ile
 305 310 315 320
 Ala Asn Glu Leu Ala Gln Gln Ile Asp Ala Ser Ile Thr Val Gln Ser
 325 330 335
 Asp Leu Asp Ile Gly Thr Thr Met Thr Leu Thr Leu Lys Lys Phe Gln
 340 345 350
 Phe Lys Lys
 355

<210> 7414

<211> 217

<212> PRT

<213> S.epidermidis

<400> 7414

Gly Glu Thr Met Leu Thr Glu Glu Lys Glu Asp Tyr Leu Lys Ala Ile
 1 5 10 15
 Leu Thr Asn Asp Gly Asp Val Ser Phe Val Ser Asn Lys Lys Leu Ser
 20 25 30
 Gln Phe Leu Asn Ile Lys Pro Pro Ser Val Ser Glu Met Val Gly Arg

```
<210> 7415
<211> 521
<212> PRT
<213> S.epidermidis
```

<400> 7415															
Ile	Glu	Lys	Met	Cys	Leu	Leu	Ile	Tyr	Leu	Leu	Ile	Arg	Arg	Lys	Arg
1				5					10					15	
His	Met	Asn	Glu	Phe	Phe	Ala	Thr	Leu	Ser	Asp	Arg	Lys	Gly	Gln	Leu
			20					25				30			
Phe	Ser	Thr	Ile	Ile	Glu	His	Ile	Gln	Leu	Ser	Phe	Ile	Ala	Leu	Phe
		35					40					45			
Ile	Ala	Thr	Leu	Ile	Ala	Val	Pro	Ile	Ala	Ile	Leu	Leu	Thr	Lys	Thr
	50					55					60				
Lys	Lys	Leu	Ser	Glu	Ile	Val	Met	Asn	Ile	Ala	Ala	Val	Leu	Gln	Thr
65				70					75					80	
Ile	Pro	Ser	Leu	Ala	Leu	Leu	Gly	Leu	Met	Ile	Pro	Ile	Phe	Gly	Ile
				85				90						95	
Gly	Arg	Leu	Pro	Ala	Ile	Ile	Ala	Leu	Val	Val	Tyr	Ala	Leu	Leu	Pro
			100				105						110		
Ile	Leu	Arg	Asn	Thr	Tyr	Thr	Gly	Ile	Lys	Glu	Val	Asp	Pro	Ser	Leu
		115					120					125			
Ile	Glu	Ala	Ala	Lys	Gly	Ile	Gly	Met	Lys	Pro	Leu	Arg	Arg	Leu	Thr
	130					135					140				
Lys	Val	Glu	Leu	Pro	Ile	Ala	Met	Pro	Val	Ile	Met	Ala	Gly	Ile	Arg
145					150				155					160	
Thr	Ala	Met	Val	Leu	Ile	Ile	Gly	Thr	Ala	Thr	Leu	Ala	Ala	Leu	Ile
				165				170						175	
Gly	Ala	Gly	Gly	Leu	Gly	Asp	Leu	Ile	Leu	Leu	Gly	Ile	Asp	Arg	Asn
			180				185					190			
Asn	Ser	Ala	Leu	Ile	Leu	Ile	Gly	Ala	Ile	Pro	Ala	Ala	Leu	Leu	Ala
		195					200					205			

```

Ile Ile Phe Asp Phe Ile Leu Arg Tyr Met Glu Arg Leu Ser Tyr Lys
  210                215                220
Lys Leu Leu Ile Ser Leu Gly Thr Ile Val Ile Val Ile Ile Ala
225                230                235                240
Ile Ala Ile Pro Met Ala Ala Gln Lys Gly Asp Lys Ile Thr Phe Ala
                245                250                255
Gly Lys Leu Gly Ser Glu Pro Ser Ile Ile Thr Asn Met Tyr Lys Ile
                260                265                270
Leu Ile Glu Glu Asp Thr Asp Asp Thr Val Glu Val Lys Asp Gly Met
                275                280                285
Gly Lys Thr Ser Phe Leu Phe Asn Ala Leu Lys Ser Asp Glu Ile Asp
290                295                300
Gly Tyr Leu Glu Phe Thr Gly Thr Val Leu Gly Glu Leu Thr Lys Glu
305                310                315                320
Asp Leu Lys Ser Lys Lys Glu Asn Asp Val Tyr Gln Gln Ala Lys Ser
                325                330                335
Ser Leu Glu Lys Lys Tyr Asp Met Thr Met Leu Lys Pro Met Lys Tyr
                340                345                350
Asn Asn Thr Tyr Ala Leu Ala Val Lys Arg Asp Phe Ala Lys Lys Tyr
                355                360                365
Gln Ile Lys Thr Ile Gly Asp Leu Arg Lys Val Glu Asp Lys Leu Lys
370                375                380
Pro Gly Phe Thr Leu Glu Phe Asn Asp Arg Pro Asp Gly Tyr Lys Ala
385                390                395                400
Val Lys Lys Thr Tyr His Leu Asn Leu Ser Asn Val Lys Thr Met Glu
                405                410                415
Pro Lys Leu Arg Tyr Thr Ala Val Lys Lys Gly Asp Ile Asn Leu Ile
                420                425                430
Asp Ala Tyr Ser Thr Asp Ala Glu Leu Lys Gln Tyr Asn Met Val Val
435                440                445
Leu Lys Asp Asp Gln His Val Phe Pro Pro Tyr Gln Gly Ala Pro Leu
450                455                460
Phe Lys Glu Lys Tyr Leu Lys Asp His Pro Glu Val Lys Lys Pro Leu
465                470                475                480
Asn Lys Leu Ala Asn Arg Ile Thr Asp Glu Glu Met Gln Glu Met Asn
                485                490                495
Tyr Lys Val Thr Val Lys Lys Glu Asp Pro Tyr Lys Val Ala Arg Glu
500                505                510
Tyr Leu Glu Lys Glu Lys Leu Ile Lys
515                520

```

<210> 7416

<211> 95

<212> PRT

<213> S.epidermidis

<400> 7416

```

Arg Gly Glu Ile Ile Pro Met Ile Ile Glu Val Ile Leu Met Val Cys
1                5                10                15
Leu Ile Ile Ile Gln Leu Met Ile Gly His Leu Trp His Gln Ile Gly
20                25                30
Trp Ser Tyr Thr Lys Ala Ile Leu Leu Met Cys Leu Pro Leu Gly Ile
35                40                45
Gly Leu Tyr Leu Met Gln Leu Phe Tyr Tyr Glu Pro Arg Tyr Thr Asn
50                55                60
Trp Glu Val Pro Leu Lys Thr Lys Leu Asn Leu Lys Tyr Met Tyr Ile

```

65					70					75				80
Leu	Thr	Leu	Leu	Glu	Tyr	Ile	Leu	Ile	Tyr	Val	Cys	Phe	Phe	Met
				85					90					95

<210> 7417

<211> 440

<212> PRT

<213> S.epidermidis

<400> 7417

Leu	Lys	Glu	Ile	Leu	Asn	Met	Pro	Ile	Ile	Thr	Asp	Val	Tyr	Ala	Arg
1				5					10					15	
Glu	Val	Leu	Asp	Ser	Arg	Gly	Asn	Pro	Thr	Val	Glu	Val	Glu	Val	Leu
			20					25					30		
Thr	Glu	Ser	Gly	Ala	Phe	Gly	Arg	Ala	Leu	Val	Pro	Ser	Gly	Ala	Ser
		35					40					45			
Thr	Gly	Glu	His	Glu	Ala	Val	Glu	Leu	Arg	Asp	Gly	Asp	Lys	Ser	Arg
	50					55					60				
Tyr	Leu	Gly	Lys	Gly	Val	Thr	Lys	Ala	Val	Glu	Asn	Val	Asn	Glu	Met
65					70					75				80	
Ile	Ala	Pro	Glu	Ile	Val	Glu	Gly	Glu	Phe	Ser	Val	Leu	Asp	Gln	Val
				85					90					95	
Ser	Ile	Asp	Lys	Met	Met	Ile	Gln	Leu	Asp	Gly	Thr	His	Asn	Lys	Gly
			100					105					110		
Lys	Leu	Gly	Ala	Asn	Ala	Ile	Leu	Gly	Val	Ser	Ile	Ala	Val	Ala	Arg
		115					120					125			
Ala	Ala	Ala	Asp	Leu	Leu	Gly	Gln	Pro	Leu	Tyr	Lys	Tyr	Leu	Gly	Gly
	130					135					140				
Phe	Asn	Gly	Lys	Gln	Leu	Pro	Val	Pro	Met	Met	Asn	Ile	Val	Asn	Gly
145					150					155					160
Gly	Ser	His	Ser	Asp	Ala	Pro	Ile	Ala	Phe	Gln	Glu	Phe	Met	Ile	Leu
				165					170					175	
Pro	Val	Gly	Ala	Glu	Ser	Phe	Lys	Glu	Ser	Leu	Arg	Trp	Gly	Ala	Glu
			180					185					190		
Ile	Phe	His	Asn	Leu	Lys	Ser	Ile	Leu	Ser	Glu	Arg	Gly	Leu	Glu	Thr
		195					200					205			
Ala	Val	Gly	Asp	Glu	Gly	Gly	Phe	Ala	Pro	Arg	Phe	Glu	Gly	Thr	Glu
	210					215					220				
Asp	Ala	Val	Glu	Thr	Ile	Ile	Lys	Ala	Ile	Glu	Lys	Ala	Gly	Tyr	Lys
225					230					235				240	
Pro	Gly	Glu	Asp	Val	Phe	Leu	Gly	Phe	Asp	Cys	Ala	Ser	Ser	Glu	Phe
				245					250					255	
Tyr	Glu	Asn	Gly	Val	Tyr	Asp	Tyr	Thr	Lys	Phe	Glu	Gly	Glu	His	Gly
			260					265					270		
Ala	Lys	Arg	Ser	Ala	Ala	Glu	Gln	Val	Asp	Tyr	Leu	Glu	Glu	Leu	Ile
		275					280					285			
Gly	Lys	Tyr	Pro	Ile	Ile	Thr	Ile	Glu	Asp	Gly	Met	Asp	Glu	Asn	Asp
	290					295					300				
Trp	Glu	Gly	Trp	Lys	Gln	Leu	Thr	Asp	Arg	Ile	Gly	Asp	Lys	Val	Gln
305					310					315					320
Leu	Val	Gly	Asp	Asp	Leu	Phe	Val	Thr	Asn	Thr	Glu	Ile	Leu	Ser	Lys
				325					330					335	
Gly	Ile	Glu	Gln	Gly	Ile	Gly	Asn	Ser	Ile	Leu	Ile	Lys	Val	Asn	Gln
			340				345						350		
Ile	Gly	Thr	Leu	Thr	Glu	Thr	Phe	Asp	Ala	Ile	Glu	Met	Ala	Gln	Lys
		355					360					365			

Ala Ser Leu Ser Val Thr Phe Asp Asp Gly Val Asn Phe Thr Glu Ser
 35 40 45
 Asp Asp Phe Ser Val Asp Asp Phe Tyr Lys Lys Met Ala Ser Ser Lys
 50 55 60
 Thr Ile Pro Thr Thr Ser Gln Pro Ala Ile Gly Asp Trp Ile Glu Asn
 65 70 75 80
 Phe Glu Arg Leu Arg Glu Gln Gly Tyr Thr Asp Val Ile Val Ile Asn
 85 90 95
 Leu Ser Ser Gly Ile Ser Gly Ser Tyr Pro Ser Ala Thr Gln Ala Gly
 100 105 110
 Glu Met Val Glu Asp Ile Gln Val His Thr Phe Asp Ser Arg Leu Ala
 115 120 125
 Ala Met Ile Glu Gly Ser Phe Ala Ile Tyr Ala Ala Gln Leu Val Gln
 130 135 140
 Lys Gly Tyr Lys Pro Asp Asp Ile Ile Asn Glu Leu Thr Glu Ile Arg
 145 150 155 160
 Gln His Ile Gly Ala Tyr Leu Ile Val Asp Asp Leu Lys Asn Leu Gln
 165 170 175
 Lys Ser Gly Arg Ile Thr Gly Ala Gln Ala Trp Val Gly Thr Leu Leu
 180 185 190
 Lys Met Lys Pro Val Leu Arg Phe Glu Glu Asp Gly Lys Ile His Pro
 195 200 205
 His Glu Lys Val Arg Thr Lys Lys Arg Ala Leu Lys Ser Leu Glu Thr
 210 215 220
 Asn Ile Phe Lys Glu Ile Glu Gly Met Glu Asp Val Thr Val Phe Val
 225 230 235 240
 Ile Asn Gly Asp Lys Thr Glu Asp Gly Lys Ser Phe Leu Gln Gln Leu
 245 250 255
 Lys Glu Asp His Pro Asn Val His Ile Gln Tyr Cys Glu Phe Gly Pro
 260 265 270
 Val Ile Ala Ser His Leu Gly Ser Gly Gly Leu Gly Leu Gly Tyr Phe
 275 280 285
 Pro Arg Arg Ile Asp Ile Asn
 290 295

<210> 7420

<211> 252

<212> PRT

<213> S.epidermidis

<400> 7420

Gly Arg Gly Ile Leu Ile Met Gln Ile Lys Leu Pro Lys Pro Phe Phe
 1 5 10 15
 Phe Glu Glu Gly Lys Arg Ala Val Leu Leu His Gly Phe Thr Gly
 20 25 30
 Asn Ser Ala Asp Val Arg Gln Leu Gly Arg Tyr Leu Gln Lys Lys Gly
 35 40 45
 Tyr Thr Ser Tyr Ala Pro Gln Tyr Glu Gly His Ala Ala Pro Pro Glu
 50 55 60
 Glu Ile Leu Lys Ser Ser Pro Phe Val Trp Phe Lys Asp Val Leu Asp
 65 70 75 80
 Gly Tyr Asp Tyr Leu Val Asp Gln Gly Tyr Glu Glu Ile Ala Val Ala
 85 90 95
 Gly Leu Ser Leu Gly Gly Ala Phe Ala Leu Lys Leu Ser Leu Asn Arg
 100 105 110
 Asp Val Lys Gly Ile Ile Thr Met Cys Ala Pro Met Glu Asn Lys Thr

Lys His Asn Ser Glu Gly Lys Val Val Glu His Lys Arg Arg Phe Ser
 50 55 60
 Asn Ile Asn Pro Leu Val Ser Asn Asp Gln Ile Lys Ser Phe Arg Ser
 65 70 75 80
 Ile Ile Glu Arg Ile Ser Gly Glu Glu Tyr Asp Lys Val Glu Ile Val
 85 90 95
 Lys Thr Glu Ser Leu Ile
 100

<210> 7424

<211> 567

<212> PRT

<213> S.epidermidis

<400> 7424

Asn Tyr Ser Val Ser Glu Leu Ile Leu Ile Phe Cys Lys His Ser Ile
 1 5 10 15
 Ile Tyr Val Gly Asp Ile Ile Val Lys Lys Leu Thr Lys Met Val Leu
 20 25 30
 Ser Tyr Lys Leu Tyr Pro Thr Leu Met Leu Ile Met Ser Val Phe Leu
 35 40 45
 Ser Phe Thr Val Val Ala Gln Asn Ile Ser Ile Ser His Phe Leu Asn
 50 55 60
 His Leu Leu Tyr Tyr Gln Gln Gln Ser Leu Leu Leu Leu Leu Ser Val
 65 70 75 80
 Ile Phe Ile Ser Leu Ile Leu Arg Ala Thr Phe Asn Met Leu Ile Gln
 85 90 95
 Phe Leu Gly Asp His Leu Ala Phe Lys Val Lys His Met Leu Arg Glu
 100 105 110
 Gln Val Ile Leu Lys Lys Ser Val Arg Ser Ile Gly Glu Glu Ile Asn
 115 120 125
 Ile Leu Thr Glu Ser Ile Asp Gly Ile Gly Pro Phe Phe Gln Ser Tyr
 130 135 140
 Leu Pro Gln Val Phe Lys Ser Met Leu Ile Pro Ile Val Ile Ile Ile
 145 150 155 160
 Thr Met Cys Phe Val His Leu Pro Thr Ala Ile Ile Met Ile Val Thr
 165 170 175
 Ala Pro Phe Ile Pro Leu Phe Tyr Val Ile Phe Gly Leu Lys Thr Arg
 180 185 190
 Asp Glu Ser Lys Asp Gln Met Thr Tyr Leu Asn Gln Phe Ser Gln Arg
 195 200 205
 Phe Leu Asn Thr Ala Lys Gly Leu Ile Thr Phe Lys Leu Leu Asn Gln
 210 215 220
 Thr Lys Gln Ser Glu Gln Gln Leu Tyr Lys Asp Ser Thr Arg Phe Arg
 225 230 235 240
 Asp Leu Thr Met Arg Ile Leu Lys Ser Ala Phe Leu Ser Gly Leu Met
 245 250 255
 Leu Glu Phe Ile Ser Met Leu Gly Ile Gly Leu Val Ala Leu Glu Ala
 260 265 270
 Ala Leu Ser Leu Val Val Phe Asn His Ile Asn Phe Val Thr Ala Ala
 275 280 285
 Ile Ala Ile Ile Leu Ala Pro Glu Phe Tyr Asn Ala Ile Lys Asp Leu
 290 295 300
 Gly Gln Ala Phe His Thr Gly Lys Gln Ser Glu Gly Ala Ser Asp Val
 305 310 315 320
 Val Phe Ser Phe Leu Glu Ser Glu Asp Lys Ala Asp Ser Pro Thr Leu

[illegible]

```
<210> 7425
<211> 322
<212> PRT
<213> S.epidermidis
```

2

Val Arg Lys Val Arg Glu Arg Asn Pro Phe Thr Thr Ile Glu Ile Leu
 145 150 155 160
 Pro Ser Asp Met Gly Gly Asp Tyr Glu Ala Leu Glu Thr Leu Met Ala
 165 170 175
 Ser Arg Pro Asp Ile Leu Asn His Asn Ile Glu Thr Val Arg Arg Leu
 180 185 190
 Thr Pro Arg Val Arg Ala Arg Ala Thr Tyr Asp Arg Thr Leu Gln Phe
 195 200 205
 Leu Arg Arg Ser Lys Glu Leu Gln Pro Asp Ile Pro Thr Lys Ser Ser
 210 215 220
 Leu Met Val Gly Leu Gly Glu Thr Met Glu Glu Ile Tyr Glu Thr Met
 225 230 235 240
 Asp Asp Leu Arg Ala Asn Asp Val Asp Ile Leu Thr Ile Gly Gln Tyr
 245 250 255
 Leu Gln Pro Ser Arg Lys His Leu Lys Val Glu Lys Tyr Tyr Thr Pro
 260 265 270
 Leu Glu Phe Gly Lys Met Arg Lys Ile Ala Met Glu Lys Gly Phe Lys
 275 280 285
 His Cys Gln Ala Gly Pro Leu Val Arg Ser Ser Tyr His Ala Asp Glu
 290 295 300
 Gln Val Asn Glu Ala Ala Lys Glu Lys Gln Arg Gln Gly Glu Glu Gln
 305 310 315 320
 Leu Asn

<210> 7426

<211> 49

<212> PRT

<213> S.epidermidis

<400> 7426

Pro Ile His Val Thr Leu Cys Glu Cys Leu Thr Leu Leu Leu Val Ile
 1 5 10 15
 Ala Val Gln Thr Leu Ile Phe Val Ile Ile Lys Val Thr Ala Leu Ala
 20 25 30
 Phe Phe Tyr Phe Lys Lys Ile Phe Tyr Tyr Lys Tyr Asn Arg Ile Asn
 35 40 45
 Ile

<210> 7427

<211> 43

<212> PRT

<213> S.epidermidis

<400> 7427

Tyr Phe Asn Val Lys Leu His Ile Lys Thr Lys Tyr Phe Gly Glu Thr
 1 5 10 15
 Leu Glu Gly Thr Gly Gln Ala Glu Asp Tyr Arg Leu Lys Leu Ser Pro
 20 25 30
 Lys Lys Ala Ser Gln Gln Tyr Glu Val Leu Leu
 35 40

<210> 7428

<211> 62

<212> PRT

<213> S.epidermidis

<400> 7428

Phe Asn Asn Val Cys Asn Met Leu Thr Asp Phe Thr Lys Thr Val Ala
 1 5 10 15
 Lys Tyr Ile Ile Trp Tyr Ile Asp Asp Glu Ser Glu Met Thr Leu Trp
 20 25 30
 Asp Val Asn Gly Thr Thr Leu Lys Arg Lys Lys Pro Lys Lys Ile Lys
 35 40 45
 Ile Leu Val Glu Tyr Met Pro Asn Leu Val Lys Lys Tyr Met
 50 55 60

<210> 7429

<211> 91

<212> PRT

<213> S.epidermidis

<400> 7429

Asn Asn Asn Val Asn Ser Lys Gln Lys Lys Trp Val Thr Ile Met Ile
 1 5 10 15
 Trp Tyr Val Cys Ala Ala Phe Phe Pro Cys Ile Leu Val Val Leu Phe
 20 25 30
 Ser Val Val Thr Arg Ser Lys Trp Ile Gly Thr Leu Val Thr Leu Val
 35 40 45
 Ile Ile Gly Ala Ser Val Tyr Lys Gly Phe Phe His Asn Glu Trp Ile
 50 55 60
 Ile Phe Ile Asp Val Thr Ser Leu Leu Ala Gly Tyr Leu Ile Ile Asp
 65 70 75 80
 Gln Leu Glu Phe His Lys Asn Gln Asn Asp Ser
 85 90

<210> 7430

<211> 172

<212> PRT

<213> S.epidermidis

<400> 7430

Leu Leu Asn Val Gly Val Phe Asn Tyr Arg Lys Arg Val Leu Ile Met
 1 5 10 15
 Lys Lys Ile Ser Leu Phe Ile Ile Phe Leu Ile Arg Val Ile Ser Gly
 20 25 30
 Ile Val Ile Phe Arg Gln Gly Trp Glu Lys Phe Thr Gly Asp Phe Thr
 35 40 45
 Leu Asn Gly Leu Val Pro Val Ile Arg Asp Asn Thr Asp Ser Pro Gln
 50 55 60
 Trp Tyr Lys Trp Phe Phe Glu His Ile Val Ala His Thr Thr Gly Leu
 65 70 75 80
 Phe Asn Ile Ile Val Pro Leu Gly Glu Met Ala Ile Gly Leu Gly Leu
 85 90 95
 Ile Leu Gly Ile Phe Ala Tyr Ala Ala Ser Phe Phe Gly Ala Phe Val
 100 105 110
 Met Ile Asn Tyr Ile Leu Ala Asp Met Ile Phe Thr Tyr Pro Leu Gln
 115 120 125
 Leu Ala Phe Phe Ile Ile Leu Leu Met Ser His Ser Leu Leu Ala Lys
 130 135 140
 Val Ser Leu Lys Glu Ile Ile Ala Tyr Phe Arg Asp Arg Asn Asn Arg

```
<210> 7431
<211> 49
<212> PRT
<213> S.epidermidis
```

```
<210> 7432
<211> 279
<212> PRT
<213> S.epidermidis
```

<400> 7432															
Glu 1	Ala	Asn	Val	Met 5	Leu	Leu	Thr	Ile	Ile 10	Leu	Leu	Ile	Leu	Ile 15	Gly
Gly	Leu	Ser	Ala 20	Ile	Leu	Gly	Ser	Ile 25	Val	Gly	Ile	Gly	Gly 30	Gly	Ile
Ile	Ile	Val 35	Pro	Thr	Leu	Val	Tyr 40	Leu	Gly	Val	Asn	His 45	His	Leu	Leu
His	Gly 50	Ile	Thr	Thr	Gln	Ile 55	Ala	Ile	Gly	Thr	Ser 60	Ser	Val	Ile	Leu
Ile 65	Val	Thr	Gly	Leu	Ser 70	Ser	Ser	Leu	Gly	Tyr 75	Leu	Lys	Thr	Lys	Gln 80
Val	Asp	Ile	Lys	Asn 85	Gly	Ser	Ile	Phe	Leu 90	Phe	Gly	Leu	Leu	Pro 95	Gly
Ser	Leu	Val 100	Gly	Ser	Phe	Leu	Ser	Arg 105	Tyr	Leu	Thr	Leu	Asp 110	Ser	Phe
Asn	Leu	Tyr 115	Phe	Gly	Val	Phe	Met 120	Ile	Phe	Val	Ser	Ile 125	Leu	Leu	Met
Ile	Arg 130	His	Lys	Ile	Lys	Pro 135	Phe	Lys	Ile	Phe	Asp 140	Lys	Pro	Lys	Tyr
Ala 145	Arg	Thr	Tyr	Val	Asp 150	Ala	Glu	Gly	Lys	Thr	Tyr 155	Arg	Tyr	Ser	Val 160
Pro	Pro	Leu	Phe	Ala 165	Phe	Ile	Thr	Thr	Leu	Phe	Ile	Gly	Leu	Leu 175	Thr
Gly	Leu	Phe 180	Gly	Ile	Gly	Gly	Gly	Ala 185	Leu	Met	Thr	Pro	Leu	Met	Leu
Ile	Val	Phe 195	Arg	Phe	Pro	Pro	His 200	Val	Ala	Val	Gly	Thr 205	Ser	Met	Met
Met	Ile 210	Phe	Phe	Ser	Ser	Val 215	Met	Ser	Ser	Ile	Gly 220	His	Ile	Phe	Gln
Gly 225	His	Val	Ala	Trp	Gly 230	Tyr	Ser	Ile	Ile	Leu	Ile	Ile	Ser	Ser	Val 240
Ile	Gly	Ala	Gln	Ile	Gly	Val	Arg	Val	Asn	Arg	Ser	Met	Lys	Ser	Asp


```
<210> 7433
<211> 40
<212> PRT
<213> S.epidermidis
```

```
<210> 7434
<211> 59
<212> PRT
<213> S.epidermidis
```

```
<210> 7435
<211> 219
<212> PRT
<213> S.epidermidis
```

<400> 7435															
Asp	Lys	Phe	Val	Phe	Lys	Asn	Glu	Arg	Glu	Val	Asn	Asn	Met	Ser	Gly
1				5					10					15	
Ile	Ser	Lys	Phe	Ile	Ser	Ala	Ile	Val	Val	Leu	Leu	Leu	Leu	Ile	Gly
			20					25					30		
Leu	Ala	Phe	Gly	Ile	Tyr	Ser	Phe	Val	Asp	Ser	Ser	Lys	Lys	Gly	Asn
		35					40					45			
Glu	Arg	Leu	Ser	Asp	Lys	Thr	Thr	Gln	Gln	Glu	Lys	Lys	Lys	Asp	Asp
	50					55					60				
Lys	Asp	Lys	Lys	Glu	Lys	Lys	Asp	Lys	Lys	Ser	Val	Glu	Glu	Lys	Lys
65					70					75					80
Asn	Asn	Thr	Gln	Gln	Thr	Gln	Gln	Val	Pro	Gln	Thr	Gln	Gln	Thr	Gln
			85						90					95	
Gln	Thr	Gln	Gln	Thr	Val	Gln	Thr	Pro	Gln	Arg	Pro	Thr	Thr	Gln	Thr
		100						105					110		
Pro	Val	Arg	Gln	Asn	Pro	Gln	Thr	Gly	Glu	Lys	Arg	Ala	Lys	Glu	Pro
		115					120					125			

Lys Thr Asp Glu Arg Lys Lys Thr Arg Gln Asp Ser Ser Asn Phe Lys
 130 135 140
 Glu Ser Pro Asn Glu Lys Asp Gln Ser Ser Thr Gln Gln Lys Pro Gln
 145 150 155 160
 Gln Asn Lys Ser Asn Gln Ser Ser Glu Asn Arg Gln Ser Thr Gln Asn
 165 170 175
 Lys Ser Asn Gln Thr Gln Ser Thr Arg Pro Gln Asn Asn Gly Asn Ser
 180 185 190
 Gly Asn Gln Asn Ala Ser Ser Gly Gln Asn Thr Gln Lys Gln Asn Asn
 195 200 205
 Asn Asn Gln Asn Ser Gln Ser Ser Lys Lys Asp
 210 215

<210> 7436

<211> 283

<212> PRT

<213> S.epidermidis

<400> 7436

Arg Asn Cys Leu Lys Phe Tyr Gln Ile Ile Leu Lys Gln Lys Glu Lys
 1 5 10 15
 Asn Asn Met Ala Met Asp Leu Ile Thr Lys Gln Asp Gly Thr Thr Leu
 20 25 30
 His Tyr Ser Thr Met Gly Gln Gly Tyr Pro Val Val Leu Val His Thr
 35 40 45
 Ala Phe Asp Asn Tyr Ala Val Phe Asn Asp Leu Ala Lys Val Leu Ala
 50 55 60
 Lys Ser Phe Gln Val Val Leu Ile Asp Leu Arg Gly His Gly Tyr Ser
 65 70 75 80
 Asp Lys Pro Arg Asn Ile Glu Phe Tyr Asp Phe Ala Asp Asp Ile Lys
 85 90 95
 Phe Leu Leu Asp Ala Ile Tyr Ile Asp Glu Ala Ala Phe Ile Gly His
 100 105 110
 Glu Met Gly Ala Leu Ile Ala Ala Asp Met Ser Val Arg Asn Pro Gly
 115 120 125
 Tyr Ile Ser Ser Ile Thr Leu Val Asn Pro Thr Ser Ile Glu Gly Glu
 130 135 140
 Leu Pro Glu Glu Arg Leu Phe Arg Lys Tyr Ala His Lys Ile Arg Asn
 145 150 155 160
 Trp Glu Asp Asp Lys Gln Glu Lys Phe Leu Asp Lys Arg Arg Tyr Tyr
 165 170 175
 Lys Ala Arg Lys Met Asn Lys Phe Leu Lys His Val Val Asp Thr Asn
 180 185 190
 Ser Ile Ser Thr Lys Glu Glu Ile Gln Ala Val Lys Asp Val Phe Lys
 195 200 205
 Ser Glu Gly Ile Ala Asp Val Phe Lys His Val Gln Val Pro Thr Leu
 210 215 220
 Ile Val Ala Gly Glu His Gly Glu Arg Thr Thr Leu Glu Ala Lys
 225 230 235 240
 Glu Val Ala Asp Leu Ile Gln His Cys Glu Phe Asn Val Tyr Gln His
 245 250 255
 Ser Ser Ala Tyr Pro Phe Val Glu Glu Gln Ala Gln Phe Thr Gln Glu
 260 265 270
 Thr Thr Asn Phe Ile Gln Gln His Ala Pro Lys
 275 280

Tyr Glu Leu Asn Gln Leu Phe Thr Tyr Gln Tyr Glu Asn Leu Lys Ile
 85 90 95
 Met Asn Lys Cys Ser Val Ser Asp Tyr Asn Val Gln Phe Ile Phe Asn
 100 105 110
 Leu Asn Glu Lys Ser Ile Arg Glu Ile Tyr Arg Asn Ile Leu Lys Ile
 115 120 125
 Gln Asn Ile Glu Leu Glu Tyr Lys Ile Gly Leu Asp Ile Ser Cys Met
 130 135 140
 Phe Asn Asp Thr Ala Gln Phe Lys Ser Leu Ala Ser Gln Ile Lys Arg
 145 150 155 160
 Leu Lys Phe Asp Tyr Leu Tyr Ile Asp Asn Ala Arg Leu Lys Ser Ser
 165 170 175
 Tyr Leu Leu Asp Asn Glu Glu Gly Leu Leu Leu Lys Asn Ile Leu Gln
 180 185 190
 Phe Lys His Leu Ile Asp Asp Leu Lys Gln Phe Asp Phe Ser Ser Glu
 195 200 205
 Asn Leu Ile Phe Leu Asn Leu Tyr Asn His Gln Leu Leu Asn Asn Asn
 210 215 220
 Glu Ile Asp Leu Ser Asn Ser Ala Pro Leu Leu Phe Lys Thr Ile Ser
 225 230 235 240
 Lys Leu Lys Lys His Phe Lys Gly Tyr Gly Leu Asn Val Phe Ser Asn
 245 250 255
 Pro Lys Val Phe Asn Ala Val His Leu Phe Asp Glu Asn Gly Phe Lys
 260 265 270
 Thr Thr Phe Gly Leu Ile Phe Asn His Leu Ser Trp Met Thr Asn Gln
 275 280 285
 Asn Gln Ile Glu Gln Arg Phe Tyr Asn Ile Ile Glu Asn Ala Asp Gln
 290 295 300
 Tyr Tyr Leu Tyr Leu Tyr Asp Trp Arg Val Ile Glu Ser Glu Ser Asn
 305 310 315 320
 Glu Ser Asp Phe Lys Asp Val Asp Ile Trp Ile Asn Phe Glu Asp Glu
 325 330 335
 Ala Leu Ile Asp Glu Tyr Ile Cys Val Ile Ala' Lys Val Asp Asp Glu
 340 345 350
 Gly Gly Asn Ile Asn His Met Ile Ser Gln Asn Leu Arg His Lys Tyr
 355 360 365
 Val Trp Ser Thr Pro Phe Leu Met Arg Val Glu Glu Asn Phe Arg Pro
 370 375 380
 Tyr Met His Ile Met Glu His Asp Phe Lys Lys Gly Pro Leu Lys Ile
 385 390 395 400
 Arg Met Lys Tyr Asn Ala Val Tyr Leu Val Glu Ile Tyr Lys Lys Asp
 405 410 415
 Lys Ile Asn Lys Arg Arg Ser Thr Thr
 420 425

<210> 7440

<211> 47

<212> PRT

<213> S.epidermidis

<400> 7440

Asn Ile Asn Val Pro Ile Lys Leu Lys Arg Asn His Thr Asp Asp Ile
 1 5 10 15
 Asn Asn Phe Asn Gln Phe Ile Ala Asp Gly Lys Leu Cys Arg Phe Thr
 20 25 30
 Lys Ile Lys Val Lys Thr Tyr Val Gly Gly Arg Tyr Glu Asn Arg

35

40

45

<210> 7441
 <211> 800
 <212> PRT
 <213> S.epidermidis

<400> 7441

Met	Ser	Leu	Val	Tyr	Leu	Met	Ala	Thr	Asn	Leu	Leu	Val	Met	Leu	Ile
1				5					10					15	
Val	Leu	Phe	Thr	Leu	Ser	His	Arg	Gln	Leu	Arg	Lys	Val	Ala	Gly	Tyr
			20					25					30		
Val	Ala	Leu	Ile	Ala	Pro	Ile	Val	Thr	Ser	Thr	Tyr	Phe	Ile	Met	Lys
		35					40					45			
Ile	Pro	Asp	Val	Ile	Arg	Asn	Lys	Phe	Ile	Ala	Val	Arg	Leu	Pro	Trp
	50					55					60				
Met	Pro	Ser	Ile	Asp	Ile	Asn	Leu	Asp	Leu	Arg	Leu	Asp	Gly	Leu	Ser
65				70					75					80	
Leu	Met	Phe	Gly	Leu	Ile	Ile	Ser	Leu	Ile	Gly	Val	Gly	Val	Phe	Phe
			85						90					95	
Tyr	Ala	Thr	Gln	Tyr	Leu	Ser	His	Ser	Thr	Asp	Asn	Leu	Pro	Arg	Phe
			100					105						110	
Phe	Ile	Tyr	Leu	Leu	Leu	Phe	Met	Phe	Ser	Met	Ile	Gly	Ile	Val	Ile
		115					120					125			
Ala	Asn	Asn	Thr	Ile	Leu	Met	Tyr	Val	Phe	Trp	Glu	Leu	Thr	Ser	Ile
	130					135					140				
Ser	Ser	Phe	Leu	Leu	Ile	Ser	Tyr	Trp	Tyr	Asn	Asn	Gly	Glu	Ser	Gln
145				150						155					160
Leu	Gly	Ala	Ile	Gln	Ser	Phe	Met	Ile	Thr	Val	Phe	Gly	Gly	Leu	Ala
			165					170						175	
Leu	Leu	Thr	Gly	Phe	Ile	Ile	Leu	Tyr	Ile	Ile	Thr	Gly	Thr	Asn	Thr
			180					185					190		
Ile	Thr	Asp	Ile	Leu	Asn	Gln	Arg	Asn	Ala	Ile	Ser	Arg	His	Pro	Leu
		195					200					205			
Phe	Ile	Pro	Met	Ile	Leu	Met	Leu	Leu	Leu	Gly	Ala	Phe	Thr	Lys	Ser
		210				215					220				
Ala	Gln	Phe	Pro	Phe	His	Ile	Trp	Leu	Pro	Lys	Ala	Met	Ala	Ala	Pro
225					230					235					240
Thr	Pro	Val	Ser	Ala	Tyr	Leu	His	Ser	Ala	Thr	Met	Val	Lys	Ala	Gly
				245					250					255	
Ile	Phe	Leu	Leu	Phe	Arg	Phe	Thr	Pro	Leu	Leu	Gly	Leu	Ser	Asn	Val
		260					265						270		
Tyr	Ile	Tyr	Thr	Val	Thr	Phe	Val	Gly	Leu	Ile	Thr	Met	Leu	Phe	Gly
		275					280					285			
Ser	Leu	Thr	Ala	Leu	Arg	Gln	Tyr	Asp	Leu	Lys	Gly	Ile	Leu	Ala	Tyr
	290					295					300				
Ser	Thr	Ile	Ser	Gln	Leu	Gly	Met	Ile	Met	Thr	Met	Val	Gly	Leu	Gly
305				310						315					320
Gly	Gly	Tyr	Ala	Gln	His	Thr	Ser	Asp	Glu	Leu	Ser	Lys	Phe	Tyr	Ile
				325					330					335	
Leu	Val	Leu	Phe	Ala	Gly	Leu	Phe	His	Leu	Met	Asn	His	Ala	Val	Phe
			340					345					350		
Lys	Cys	Ala	Leu	Phe	Met	Gly	Val	Gly	Ile	Ile	Asp	His	Glu	Ser	Gly
		355					360					365			
Thr	Arg	Asp	Ile	Arg	Leu	Leu	Asn	Gly	Met	Arg	Lys	Val	Phe	Pro	Lys
	370					375					380				

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

```

Met His Ile Val Met Leu Leu Ala Ala Leu Ser Met Ala Gly Val Pro
385          390          395          400
Phe Leu Asn Gly Phe Leu Ser Lys Glu Met Phe Leu Asp Ser Leu Thr
          405          410          415
Lys Ala Asn Glu Leu Asp Gln Tyr Gly Phe Val Leu Thr Phe Val Ile
          420          425          430
Ile Ser Ile Gly Val Ile Ala Ser Ile Leu Thr Phe Thr Tyr Ala Leu
          435          440          445
Tyr Met Ile Lys Glu Thr Phe Trp Gly Asn Tyr Asn Ile Glu Lys Phe
          450          455          460
Lys Arg Lys Gln Ile His Glu Pro Trp Leu Phe Ser Leu Pro Ala Val
465          470          475          480
Ile Leu Met Leu Leu Ile Pro Val Ile Phe Phe Val Pro Asn Val Phe
          485          490          495
Gly Asn Phe Val Ile Leu Pro Ala Thr Arg Ser Val Ser Gly Ile Gly
          500          505          510
Ala Glu Val Asp Ala Phe Val Pro His Ile Ser Gln Trp His Gly Val
          515          520          525
Asn Leu Pro Leu Ile Leu Ser Ile Val Val Ile Ile Ile Gly Leu Ile
          530          535          540
Leu Ala Leu Val Val Asn Trp Lys Glu Val Thr His Gln Ile Ile Lys
545          550          555          560
Ser Ala Ser Ile Thr Asp Gly Tyr Arg Lys Ile Tyr Arg Glu Phe Glu
          565          570          575
Leu Tyr Ser Ala Arg Gly Ile Arg Ala Leu Met Asn Asn Lys Leu Asn
          580          585          590
Tyr Tyr Ile Met Ile Thr Leu Phe Ile Phe Val Ala Ile Val Val Tyr
          595          600          605
Gly Tyr Leu Thr Val Gly Phe Pro His Val His Gln Leu His Ile Ser
          610          615          620
Ser Phe Gly Pro Leu Glu Val Ile Leu Ser Val Val Thr Leu Ile Ile
625          630          635          640
Gly Ile Ser Leu Ile Phe Ile Arg Gln Arg Leu Thr Met Val Val Leu
          645          650          655
Asn Gly Met Ile Gly Phe Ala Val Thr Leu Tyr Phe Ile Ala Met Lys
          660          665          670
Ala Pro Asp Leu Ala Leu Thr Gln Leu Val Val Glu Thr Ile Thr Thr
          675          680          685
Ile Leu Phe Ile Val Ser Phe Ser Arg Leu Pro Asn Ile Pro Arg Val
          690          695          700
Lys Ala Asn Leu Lys Lys Glu Thr Phe Lys Ile Ile Val Ser Leu Val
705          710          715          720
Met Ala Leu Thr Val Val Ser Leu Ile Phe Val Ala Gln Gln Ala Asp
          725          730          735
Gly Met Pro Ser Ile Ala Lys Phe Tyr Glu Asp Ala Tyr Glu Leu Thr
          740          745          750
Gly Gly Lys Asn Ile Val Asn Ala Ile Leu Gly Asp Phe Arg Ala Leu
          755          760          765
Asp Thr Met Phe Glu Gly Leu Val Leu Ile Ile Ala Gly Leu Gly Ile
          770          775          780
Tyr Thr Leu Leu Asn Tyr Lys Asp Arg Arg Gly Gln Asp Glu Arg Glu
785          790          795          800

```

<210> 7442

<211> 46

<212> PRT

<213> S.epidermidis

<400> 7442

Lys Met Leu Val Lys Phe Phe Pro Lys Ser Ile Leu Phe Ser Ile Ile
 1 5 10 15
 Phe Ile Lys Leu Arg Lys Ile Arg Asn Asn Leu Ile Phe Phe Glu Tyr
 20 25 30
 Ser Lys Cys Tyr Ile Ala Asn Ser Ser Ile Asn Phe Lys Arg
 35 40 45

<210> 7443

<211> 43

<212> PRT

<213> S.epidermidis

<400> 7443

Arg Phe Ile Val Ser Pro His Leu Lys Ile Lys Ser Cys His Leu Ile
 1 5 10 15
 Asp Thr Tyr Tyr Tyr Tyr Ser Tyr Phe Ile His Phe Leu Ala Asn Lys
 20 25 30
 Met Ser Lys Thr Phe Phe Asn Met His Leu Lys
 35 40

<210> 7444

<211> 237

<212> PRT

<213> S.epidermidis

<400> 7444

Lys Arg Ile Val Lys Val Met Glu Ala Thr Cys Met Asp Lys Lys Lys
 1 5 10 15
 Leu Ile Lys Thr Leu Ile Asn Val Leu Pro Ile Val Ile Val Pro Leu
 20 25 30
 Val Thr Glu Arg Lys Arg Ile Lys Glu His Pro Asp Val Gln Lys Val
 35 40 45
 Thr Asn Ala Thr Ser Lys Ala Thr Ser Lys Thr Thr Ser Ala Ile Ser
 50 55 60
 Asn Lys Ala Ser Asp Val Lys Glu Tyr Val Gly Asp Lys Lys Gln Glu
 65 70 75 80
 Phe Asp Asn Lys Arg Glu Leu Lys Lys Ile Ala Lys Glu Asn Asp Pro
 85 90 95
 Ala Tyr Ile Glu Lys Lys Gly Glu Lys Leu Ala Lys Gln Asn Arg Lys
 100 105 110
 Glu Ala Asp Lys Met Asp Lys Lys Leu Gln Lys Asn Ile Glu Lys Arg
 115 120 125
 His Lys Glu Glu Gln Lys Gln Arg Glu Ala Asn Gln Lys Gln Arg Ile
 130 135 140
 Lys Asp Met Lys Lys Thr Gln Lys Tyr Glu Glu Gln Val Gly Leu Thr
 145 150 155 160
 Pro Gly Lys Ile Asp His Glu Ile Glu Lys Lys Gly Glu Lys Leu Glu
 165 170 175
 Lys Asp Asn Arg Lys Asp Ile Lys Lys Leu Asp Lys Lys Leu Gln Lys
 180 185 190
 Asn Ile Glu Lys Arg His Lys Glu Glu Gln Lys Gln Arg Glu Glu Ala
 195 200 205
 Glu Lys Ala Arg Lys Lys Glu Phe Lys Lys Tyr Glu Asn Tyr Val Ala

210 215 220
 Asp Ser Val Val Lys Gln His Lys Glu Ser Asn His Ser
 225 230 235

<210> 7445
 <211> 143
 <212> PRT
 <213> S.epidermidis

<400> 7445
 Met Met Ile Val Ile Val Thr Leu Thr Leu Arg Arg Trp Ile Asp Met
 1 5 10 15
 Ala Ile Val Asn Lys Val Ile Ile Val Glu Gly Lys Ser Asp Lys Lys
 20 25 30
 Arg Val Gln Gln Val Ile Ala Glu Pro Ala Asn Ile Ile Cys Thr His
 35 40 45
 Gly Thr Met Ser Ile Asp Lys Ile Asp Asn Met Ile Glu Thr Leu Tyr
 50 55 60
 Asp Lys Gln Val Tyr Val Leu Ala Asp Ser Asp Asp Glu Gly Glu Lys
 65 70 75 80
 Ile Arg Lys Trp Phe Lys Arg Tyr Leu Ser Glu Ser Glu His Ile Tyr
 85 90 95
 Val Asp Lys Thr Phe Cys Glu Val Ala Lys Cys Pro Lys Asn Tyr Leu
 100 105 110
 Ala His Val Leu Ser Arg Tyr Gly Phe Asn Val Lys Lys Glu Lys Lys
 115 120 125
 Leu Met Asn Asn Leu Lys Thr Glu Arg Leu Val Leu Val Asn Glu
 130 135 140

<210> 7446
 <211> 489
 <212> PRT
 <213> S.epidermidis

<400> 7446
 Gly Arg Val Val Met Ala Asp Leu Ile Asn Ile Leu Asn His Phe Val
 1 5 10 15
 Gln Glu Gln Pro Glu Ala Val Ala Val Arg His Thr Asn Asp Glu Leu
 20 25 30
 Thr Tyr Lys Gln Leu Asp Glu Glu Ser Ser Lys Leu Ala His Leu Leu
 35 40 45
 Gln Asp Ser Lys Lys Pro Met Ile Leu Tyr Gly His Met Ser Pro Tyr
 50 55 60
 Met Ile Val Gly Met Ile Gly Ala Ile Lys Ser Gly Cys Gly Tyr Val
 65 70 75 80
 Pro Ile Asp Thr Ser Val Pro Lys Glu Arg Val Asn Met Ile Ile Asp
 85 90 95
 Lys Val Gln Pro Glu Ile Ile Phe Asn Thr Ser Asp Glu Thr Leu Glu
 100 105 110
 Gln Thr Asn Ala Gln Val Leu Lys Val Ser Asp Ile Gln Asp Ser Gln
 115 120 125
 Tyr Pro Ile Val Phe Asp Ser Gln Met Lys Gln Asn Asp Val Val Tyr
 130 135 140
 Thr Ile Phe Thr Ser Gly Ser Thr Gly Glu Pro Lys Gly Val Gln Ile
 145 150 155 160
 Glu Tyr Ala Ser Leu Asn Glu Phe Ala Glu Trp Met Val Ser Leu Asn

165 170 175
 Lys Thr Gly Thr Gly Lys Glu Trp Leu Asn Gln Ala Pro Phe Ser Phe
 180 185 190
 Asp Leu Ser Val Met Ala Ile Tyr Pro Cys Leu Thr Ser Gly Gly Thr
 195 200 205
 Leu Asn Leu Val Asp Lys Asp Met Ile Lys Lys Pro Lys Leu Leu Asn
 210 215 220
 Glu Met Leu Val Gln Thr Pro Met Asn Val Trp Val Ser Thr Pro Ser
 225 230 235 240
 Phe Ile Glu Met Cys Leu Leu Leu Pro Asn Leu Asn Glu Gln Gln Tyr
 245 250 255
 Ser Ser Leu Lys Gln Phe Phe Phe Cys Gly Glu Ile Leu Pro His Lys
 260 265 270
 Thr Ala Lys Ala Leu Val Glu Arg Phe Pro Asn Ser Met Ile Tyr Asn
 275 280 285
 Thr Tyr Gly Pro Thr Glu Ala Thr Val Ala Val Thr Ser Ile Gln Ile
 290 295 300
 Thr Glu Glu Ile Leu Asn Gln Tyr Asn Pro Leu Pro Val Gly Val Ala
 305 310 315 320
 Arg Pro Gly Thr Lys Leu Phe Ala Thr Glu Glu Gly Glu Leu Val Ile
 325 330 335
 Glu Gly Gln Ser Val Ser Leu Gly Tyr Leu Lys Asn Glu Glu Lys Thr
 340 345 350
 Thr Ala Val Phe Asn Phe Glu Asp Gly Val Arg Thr Tyr His Thr Gly
 355 360 365
 Asp Lys Ala Lys Ile Glu Asp Gly Leu Trp Phe Ile Gln Gly Arg Ile
 370 375 380
 Asp Phe Gln Ile Lys Leu Asn Gly Tyr Arg Met Glu Leu Glu Glu Ile
 385 390 395 400
 Glu Thr Gln Leu Arg Gln Ser Lys His Val Arg Glu Ala Val Val Val
 405 410 415
 Pro Val Tyr Lys Asn Gly Lys Val Ile His Leu Ile Gly Ala Val Val
 420 425 430
 Pro Thr Glu Pro Val Glu Asp Asn Leu Ala Met Thr Thr His Ile Lys
 435 440 445
 His Glu Leu Lys Ser Arg Leu Pro Glu Tyr Met Ile Pro Arg Lys Phe
 450 455 460
 Glu Trp Met Glu Gln Leu Pro Leu Thr Ser Asn Gly Lys Leu Asp Arg
 465 470 475 480
 Lys Lys Ile Ala Glu Val Val Asn Gly
 485

<210> 7447

<211> 637

<212> PRT

<213> S.epidermidis

<400> 7447

Leu Met Gln Val Ile Ile Met Gln Glu Ser Lys Asn Leu Met Arg Ile
 1 5 10 15
 Lys Ser Asn Leu Lys Gln Pro Met Lys Gln Thr Ser Arg Asp Gly Val
 20 25 30
 Ser Leu Arg Lys Leu Lys Asn Asn Lys Gly Asn Val Ile Met Gln Glu
 35 40 45
 Thr Leu Ser His Tyr Phe Gly Tyr Lys Ser Phe Arg Pro Gly Gln Glu
 50 55 60

Glu	Ile	Ile	Thr	Lys	Ile	Leu	Asn	His	Gln	His	Thr	Leu	Gly	Val	Leu
65					70					75					80
Pro	Thr	Gly	Gly	Gly	Lys	Ser	Ile	Cys	Tyr	Gln	Val	Pro	Gly	Leu	Met
				85					90					95	
Gln	Gly	Gly	Thr	Thr	Ile	Val	Ile	Ser	Pro	Leu	Ile	Ser	Leu	Met	Lys
			100					105					110		
Asp	Gln	Val	Asp	Gln	Leu	Gln	Ala	Met	Gly	Ile	Gln	Ala	Ala	Tyr	Leu
		115					120					125			
Asn	Ser	Ser	Leu	Thr	His	Lys	Gln	Gln	Lys	Glu	Ile	Glu	Glu	Gln	Ile
	130					135					140				
Lys	Arg	Gly	Ala	Ile	Gln	Phe	Leu	Tyr	Val	Ala	Pro	Glu	Arg	Phe	Glu
145					150					155					160
Asn	Thr	Phe	Phe	Leu	Asn	Leu	Leu	Arg	Lys	Ile	Glu	Ile	Pro	Leu	Ile
				165					170					175	
Ala	Phe	Asp	Glu	Ala	His	Cys	Ile	Ser	Lys	Trp	Gly	His	Asp	Phe	Arg
		180						185					190		
Pro	Ser	Tyr	Gln	Ser	Val	Ile	Gln	Lys	Val	Phe	Thr	Leu	Pro	Gln	Asn
		195					200					205			
Phe	Thr	Ile	Val	Ala	Leu	Thr	Ala	Thr	Ala	Thr	Ala	Glu	Val	Gln	Gln
	210					215					220				
Asp	Ile	Met	Ser	Lys	Leu	Ser	Ile	Gly	Gln	Asn	Asp	Val	Val	Lys	Thr
225					230					235					240
Ser	Thr	Lys	Arg	Arg	Asn	Leu	Ile	Phe	Lys	Val	Asn	Pro	Thr	Tyr	Gln
			245						250					255	
Arg	Gln	Lys	Phe	Val	Val	Asp	Tyr	Val	Ala	Asn	His	Glu	Gly	Gln	Ala
			260					265					270		
Gly	Ile	Ile	Tyr	Cys	Ser	Thr	Arg	Lys	Gln	Val	Glu	Glu	Leu	His	Glu
	275						280					285			
Ala	Leu	Asn	Ser	Glu	Lys	Ile	Lys	Ser	Thr	Ile	Tyr	His	Ala	Gly	Leu
	290					295					300				
Thr	Asn	Lys	Glu	Arg	Ile	Glu	Ala	Gln	Asn	Asp	Phe	Leu	Tyr	Asp	Arg
305					310					315					320
Val	Glu	Val	Val	Ile	Ala	Thr	Asn	Ala	Phe	Gly	Met	Gly	Ile	Asp	Lys
				325					330					335	
Ser	Asn	Val	Arg	Tyr	Val	Ile	His	Tyr	Asn	Met	Pro	Gly	Asp	Leu	Glu
			340					345					350		
Ser	Tyr	Tyr	Gln	Glu	Ala	Gly	Arg	Ala	Gly	Arg	Asp	Gly	Leu	Lys	Ser
		355				360						365			
Glu	Cys	Ile	Leu	Leu	Phe	Ser	Glu	Arg	Asp	Lys	Gly	Leu	His	Glu	Tyr
	370					375					380				
Phe	Ile	Thr	Val	Ser	Gln	Ala	Asp	Asp	Asp	Tyr	Lys	Asp	Lys	Met	Gly
385					390					395					400
Glu	Lys	Leu	Thr	Lys	Met	Ile	Gln	Tyr	Thr	Lys	Thr	Lys	Lys	Cys	Leu
				405					410					415	
Glu	Ala	Thr	Ile	Val	His	Tyr	Phe	Glu	Pro	Asn	Glu	Asn	Leu	Glu	Glu
			420					425					430		
Cys	Asn	Gln	Cys	Ser	Asn	Cys	Ile	Gln	Glu	Asn	Lys	Thr	Tyr	Asp	Met
		435					440					445			
Thr	Arg	Glu	Ala	Lys	Met	Ile	Ile	Ser	Cys	Ile	Ala	Arg	Met	Lys	Gln
	450					455					460				
Gln	Glu	Asn	Tyr	Ser	Val	Ile	Ile	Gln	Val	Leu	Arg	Gly	Glu	Val	Thr
465					470					475					480
Asp	Tyr	Ile	Lys	His	His	His	Tyr	Asn	Glu	Leu	Thr	Thr	His	Gly	Leu
				485					490					495	
Met	Lys	Asn	Tyr	Thr	Thr	Ser	Glu	Leu	Ser	His	Leu	Ile	Asp	Glu	Leu
			500					505					510		

3400

Lys Ala Lys Lys Asn Tyr Thr Gly Ile Phe Ile Arg Leu
50 55 60

<210> 7450

<211> 639

<212> PRT

<213> S.epidermidis

<400> 7450

Glu Arg Lys Val Tyr Leu Val Ala Ser Ile Met Ser Phe Asn Glu Ile
1 5 10 15
Ile Phe Lys Asn Phe Lys Gln Asn Val Thr His Tyr Ala Ile Tyr Leu
20 25 30
Leu Ser Leu Val Ile Ser Val Val Leu Tyr Phe Ser Phe Val Thr Leu
35 40 45
Lys Tyr Ala His His Leu His Gly Asn Gln Ser Phe Pro Ala Ile Lys
50 55 60
Glu Gly Ser Gln Val Gly Ser Tyr Phe Leu Phe Ile Ile Ile Val Val
65 70 75 80
Phe Leu Leu Tyr Ala Asn Phe Leu Phe Leu Lys Arg Arg Gly Arg Glu
85 90 95
Leu Ser Leu Leu Gln Ile Ile Gly Leu Thr Lys Lys Asp Ile Met Lys
100 105 110
Met Ile Met Leu Glu Gln Leu Met Thr Phe Met Met Thr Thr Ile Val
115 120 125
Gly Ile Ile Leu Gly Ile Phe Gly Ser Lys Ile Leu Leu Met Ile Val
130 135 140
Leu Arg Leu Leu Gly Ile Asn Val Ser Val Ser Ile Ile Phe Asn Tyr
145 150 155 160
His Ala Ile Leu Glu Thr Leu Leu Leu Ile Ala Val Ser Tyr Val Leu
165 170 175
Ile Val Phe Gln Ser Tyr Val Tyr Leu Leu Lys Arg Ser Ile Lys Glu
180 185 190
Leu Ala Ser Asp Val Asn Lys Lys Glu Phe Ser His Thr Arg Thr Thr
195 200 205
Leu Gly Glu Val Val Leu Gly Leu Leu Gly Ile Ile Met Ile Val Ser
210 215 220
Gly Tyr Ile Met Ser Thr Lys Leu Val Asp Asn Val Glu Thr Ile Ile
225 230 235 240
Gln Pro Phe Ala Ile Leu Phe Leu Thr Val Ile Gly Ser Tyr Phe Phe
245 250 255
Phe Arg Ser Thr Val Ser Leu Ile Phe Lys Ala Ile Gln Arg Leu Arg
260 265 270
Asn Gly Thr Val Ser Val Thr Asp Val Met Phe Thr Ser Pro Ile Ile
275 280 285
Tyr Arg Val Lys Lys Asn Ala Phe Ser Leu Thr Val Met Thr Val Val
290 295 300
Ser Ala Ile Thr Val Ser Val Leu Cys Phe Ala Ala Leu Ser Arg Ser
305 310 315 320
Thr Leu Thr Asn Glu Val Leu Leu Ser Ser Pro His Asp Val Thr Leu
325 330 335
Lys Asn Gln Lys Gln Ala Asn Glu Leu Ala Phe Lys Leu Asn Asn Arg
340 345 350
Asn Ile Glu His Tyr Tyr Asn Tyr Lys Glu Val Val Tyr Ala Lys Val
355 360 365
Tyr Lys Asp His Leu Phe Ser Glu Gly Val Tyr Arg Pro Lys Glu Ile

370		375		380
Thr Val Thr Ser Asp Lys Tyr Ile Pro Asn Val Ser Thr Lys Lys Gly				
385		390		395
Gln Thr Asp Ile Ile Ile Pro Arg Gly Ser Leu Lys Asp Val Val Lys				400
		405		410
				415
Thr Asp Lys Lys Arg Thr Ala Tyr Val Gly Ser Lys Lys Phe Arg Leu				
		420		425
				430
Lys Val Ser Leu Arg Lys Gly Ile Asn Lys Val Tyr Phe Met Ser Asp				
		435		440
				445
Val Asp Arg Gly Arg Pro Thr Leu Ile Leu Asn Asp Glu Asp Tyr Gln				
		450		455
				460
Lys Ile Arg Glu His Ile Lys Glu Lys Asn Ile Val Ser Gln Tyr Gly				
465		470		475
				480
Phe Asp Leu Lys Asn Lys Asn Asp Leu Pro Glu Leu Glu Lys Leu Val				
		485		490
				495
Ser Ser Ile Asn Glu Asp Ile Glu Thr Arg Ser Glu Ala Ala Ser Glu				
		500		505
				510
Ile Ser Ser Leu Thr Gly Ile Leu Leu Phe Val Thr Ser Phe Leu Gly				
		515		520
				525
Ile Thr Phe Leu Ile Ala Ala Gly Cys Ile Ile Tyr Ile Lys Gln Ile				
		530		535
				540
Asp Glu Thr Glu Asp Glu Leu Glu Asn Tyr Thr Ile Leu Arg Lys Leu				
545		550		555
				560
Gly Phe Thr His Gln Asp Met Ser Lys Gly Leu Lys Leu Lys Val Ile				
		565		570
				575
Phe Asn Phe Gly Leu Pro Leu Ile Ile Ala Leu Leu His Ala Tyr Phe				
		580		585
				590
Ala Ser Leu Ala Tyr Met His Leu Met Asn Val Thr Asn Gln Ile Pro				
		595		600
				605
Ile Phe Ile Val Met Ala Val Tyr Thr Ala Thr Tyr Ala Val Phe Ala				
		610		615
				620
Ile Ile Ala Tyr Asn His Ser Lys Arg Thr Ile Lys His Ser Ile				
625		630		635

<210> 7451

<211> 439

<212> PRT

<213> S.epidermidis

<400> 7451

Glu Glu Lys Val Met Thr Thr Lys Thr Leu Asn Ile Ser Glu Glu Gln				
1		5		10
				15
Leu Val Asp Tyr Ser Lys Ala His Asn Glu Pro Ser Trp Met Thr Glu				
		20		25
				30
Leu Arg Lys Lys Ala Leu Lys Leu Thr Glu Thr Leu Glu Met Pro Lys				
		35		40
				45
Pro Asp Lys Thr Lys Leu Arg Lys Trp Asp Phe Asp Thr Phe Lys Gln				
		50		55
				60
His His Thr Thr Gly Asp Ala Tyr Thr Gln Leu Thr Asp Leu Pro Lys				
65		70		75
				80
Ser Val Lys Glu Ile Ile Asp Val Glu Asn Ser Glu Asn Leu Ile Ile				
		85		90
				95
Gln His Asn Asn Glu Leu Ala Tyr Thr Gln Val Ser Asp Gln Ala Lys				
		100		105
				110
His Asp Gly Val Ile Ile Glu Gly Leu Ser Glu Ala Leu Val Asn His				
		115		120
				125

Ser Asp Leu Val Gln Lys Tyr Phe Met Thr Lys Ala Val Asp Val Asp
 130 135 140
 Glu His Arg Leu Thr Ala Leu His Thr Ala Leu Val Asn Gly Gly Ile
 145 150 155 160
 Phe Val Tyr Val Pro Lys Asn Thr Val Val Glu His Pro Ile Gln Tyr
 165 170 175
 Val Val Leu His Asp Asp Glu Gln Ala Ser Phe Tyr Asn His Val Ile
 180 185 190
 Ile Val Thr Glu Glu Ser Ala Glu Val Thr Tyr Val Glu Asn Tyr Leu
 195 200 205
 Ser Thr Thr Ser Gly Glu Asp Asn Gln Leu Asn Ile Val Ser Glu Val
 210 215 220
 Ile Ala Gly Ala Asn Ser Asn Val Thr Tyr Gly Ser Val Asp Tyr Leu
 225 230 235 240
 Asp Lys Gly Phe Thr Gly His Ile Ile Arg Arg Gly Ser Ala Asp Ala
 245 250 255
 Asp Ala Ser Ile Asn Trp Ala Leu Gly Leu Met Asn Glu Gly Ser Gln
 260 265 270
 Ile Ile Asp Asn Thr Thr Asn Leu Asn Gly Asp Arg Ser Thr Ser Ala
 275 280 285
 Leu Lys Ser Val Val Val Gly Thr Gly Asp Gln Lys Ile Asn Leu Thr
 290 295 300
 Ser Lys Ile Val Gln Tyr Gly Lys Glu Thr Asp Gly Tyr Ile Leu Lys
 305 310 315 320
 His Gly Val Met Lys Glu Asn Ala Ser Ser Val Phe Asn Gly Ile Gly
 325 330 335
 Tyr Ile Lys His Gly Gly Thr Lys Ser Ile Ala Asn Gln Glu Ser Arg
 340 345 350
 Val Leu Met Leu Ser Glu Asn Ala Arg Gly Asp Ala Asn Pro Ile Leu
 355 360 365
 Leu Ile Asp Glu Asp Asp Val Glu Ala Gly His Ala Ala Ser Val Gly
 370 375 380
 Arg Val Asp Pro Glu Gln Leu Tyr Tyr Leu Met Ser Arg Gly Ile Ser
 385 390 395 400
 Arg Ala Glu Ala Glu Arg Leu Val Ile His Gly Phe Leu Asp Pro Val
 405 410 415
 Val Arg Glu Leu Pro Ile Asp Asp Val Lys Arg Gln Leu Arg Glu Val
 420 425 430
 Ile Glu Arg Lys Val Ser Lys
 435

<210> 7452

<211> 471

<212> PRT

<213> S.epidermidis

<400> 7452

Asn Gln Gly Val Ile Lys Met Ala Lys Gln Ala Pro Asp Val Gly Asp
 1 5 10 15
 Tyr Lys Tyr Gly Phe His Asp Glu Asp Val Ser Ile Phe Arg Ser Glu
 20 25 30
 Arg Gly Leu Thr Glu Asn Ile Val Thr Glu Ile Ser Lys Met Lys Glu
 35 40 45
 Glu Pro Gln Trp Met Leu Asp Phe Arg Leu Lys Ala Leu Lys Leu Phe
 50 55 60
 Tyr Lys Met Pro Met Pro Gln Trp Gly Gly Asp Leu Ser Glu Leu Asp

65					70					75					80
Phe	Asp	Asp	Ile	Thr	Tyr	Tyr	Val	Lys	Pro	Ser	Glu	His	Thr	Glu	Arg
				85					90					95	
Ser	Trp	Asp	Glu	Val	Pro	Glu	Glu	Ile	Lys	Arg	Thr	Phe	Asp	Lys	Leu
			100					105					110		
Gly	Ile	Pro	Glu	Ala	Glu	Gln	Lys	Tyr	Leu	Ala	Gly	Val	Ser	Ala	Gln
		115					120					125			
Tyr	Glu	Ser	Glu	Val	Val	Tyr	His	Asn	Met	Glu	Lys	Glu	Leu	Glu	Glu
	130					135					140				
Lys	Gly	Ile	Ile	Phe	Lys	Asp	Thr	Asp	Ser	Ala	Leu	Arg	Glu	Asn	Glu
145					150					155					160
Glu	Leu	Phe	Arg	Glu	Tyr	Phe	Ala	Ser	Val	Val	Pro	Ala	Ala	Asp	Asn
				165					170					175	
Lys	Phe	Ala	Ala	Leu	Asn	Ser	Ala	Val	Trp	Ser	Gly	Gly	Ser	Phe	Ile
			180					185					190		
Tyr	Val	Pro	Lys	Asn	Val	Lys	Leu	Asp	Thr	Pro	Leu	Gln	Ala	Tyr	Phe
		195					200					205			
Arg	Ile	Asn	Ser	Glu	Asn	Met	Gly	Gln	Phe	Glu	Arg	Thr	Leu	Ile	Ile
	210					215					220				
Ala	Asp	Glu	Gly	Ala	Ser	Val	Asn	Tyr	Val	Glu	Gly	Cys	Thr	Ala	Pro
225					230					235					240
Val	Tyr	Ser	Thr	Ser	Ser	Leu	His	Ser	Ala	Val	Val	Glu	Ile	Ile	Val
				245					250					255	
His	Lys	Asp	Ala	His	Val	Arg	Tyr	Thr	Thr	Ile	Gln	Asn	Trp	Ala	Asn
			260					265					270		
Asn	Val	Tyr	Asn	Leu	Val	Thr	Lys	Arg	Thr	Phe	Val	His	Glu	Asn	Gly
	275						280					285			
Asn	Met	Glu	Trp	Val	Asp	Gly	Asn	Leu	Gly	Ser	Lys	Leu	Thr	Met	Lys
	290					295					300				
Tyr	Pro	Asn	Cys	Val	Leu	Gly	Glu	Gly	Ala	Lys	Gly	Ser	Thr	Leu	
305				310					315					320	
Ser	Ile	Ala	Phe	Ala	Gly	Lys	Gly	Gln	Val	Gln	Asp	Ala	Gly	Ala	Lys
				325					330					335	
Met	Ile	His	Lys	Ala	Pro	Asn	Thr	Ser	Ser	Thr	Ile	Val	Ser	Lys	Ser
			340					345					350		
Ile	Ser	Lys	Asn	Gly	Gly	Lys	Val	Ile	Tyr	Arg	Gly	Ile	Val	His	Phe
	355						360					365			
Gly	Arg	Lys	Ala	Lys	Gly	Ala	Arg	Ser	Asn	Ile	Glu	Cys	Asp	Thr	Leu
	370					375					380				
Ile	Leu	Asp	Asn	Glu	Ser	Thr	Ser	Asp	Thr	Ile	Pro	Tyr	Asn	Glu	Val
385					390					395					400
Phe	Asn	Asp	Asn	Ile	Ser	Leu	Glu	His	Glu	Ala	Lys	Val	Ser	Lys	Val
				405					410					415	
Ser	Glu	Glu	Gln	Leu	Phe	Tyr	Leu	Met	Ser	Arg	Gly	Ile	Ser	Glu	Glu
			420					425					430		
Glu	Ala	Thr	Glu	Met	Ile	Val	Met	Gly	Phe	Ile	Glu	Pro	Phe	Thr	Lys
	435						440					445			
Glu	Leu	Pro	Met	Glu	Tyr	Ala	Val	Glu	Met	Asn	Arg	Leu	Ile	Lys	Phe
	450					455					460				
Glu	Met	Glu	Gly	Ser	Ile	Gly									
465					470										

<210> 7453

<211> 58

<212> PRT

<213> S.epidermidis

<400> 7453

Val	Gly	Leu	Val	Tyr	Phe	Met	Lys	Phe	Ile	Thr	Ile	Lys	Ala	Ile	Thr
1				5					10					15	
Glu	Lys	Gly	Leu	Asp	Lys	Lys	Val	Asn	Gln	Phe	Leu	Lys	Ser	His	Pro
			20					25					30		
Gln	Ile	Glu	Ile	Ile	Lys	Phe	Asp	Tyr	Gln	Met	Gly	Tyr	Ser	Gly	Val
		35					40					45			
Ser	Val	Gly	Ile	Leu	Tyr	Arg	Asp	Asn	Ile						
	50					55									

<210> 7454

<211> 224

<212> PRT

<213> S.epidermidis

<400> 7454

Glu	Asp	Glu	Val	Val	Val	Thr	Lys	Ala	Leu	Leu	Pro	Ser	Gln	Gln	Arg
1				5					10					15	
Ile	Asp	Leu	Asn	Ser	Ser	Met	Leu	Leu	Glu	Lys	Ser	Leu	Ile	Lys	Tyr
			20					25					30		
Arg	Arg	His	Ile	Met	Lys	Arg	Ile	Ala	Val	Tyr	Cys	Gly	Ala	Ser	Lys
		35				40					45				
Gly	Lys	Asn	Pro	Ser	Tyr	Val	Lys	Glu	Ala	Tyr	Glu	Leu	Gly	Lys	Tyr
	50					55				60					
Met	Ala	Glu	Gln	Gly	Tyr	Glu	Leu	Val	Phe	Gly	Ala	Gly	Ser	Val	Gly
65					70				75						80
Ile	Met	Gly	Ala	Ile	Gln	Asp	Gly	Ile	Leu	Glu	His	Gly	Gly	Lys	Ala
				85					90					95	
Ile	Gly	Val	Met	Pro	Lys	Met	Leu	Asp	Glu	Arg	Glu	Ile	Thr	Ser	Gln
			100					105					110		
Lys	Val	Ser	Glu	Leu	Ile	Leu	Val	Asp	Ser	Met	His	Glu	Arg	Lys	Asn
		115					120					125			
Lys	Met	Thr	Glu	Leu	Ala	Asp	Ala	Phe	Ile	Met	Ala	Pro	Gly	Gly	Ala
	130					135					140				
Gly	Ser	Leu	Glu	Glu	Phe	Phe	Glu	Met	Tyr	Ser	Trp	Ala	Gln	Ile	Gly
145					150				155						160
Ile	His	Gln	Lys	Pro	Ile	Gly	Val	Phe	Asn	Leu	Asn	Gly	Phe	Phe	Glu
				165				170					175		
Pro	Leu	Gln	His	Leu	Ile	Asp	His	Met	Ile	Lys	Glu	Gly	Phe	Ile	Asp
			180				185						190		
Glu	Lys	Tyr	Gln	Lys	Leu	Ala	Pro	Leu	Tyr	Asp	Thr	Lys	Glu	Ser	Leu
		195					200					205			
Ile	Glu	Gly	Leu	Lys	His	Tyr	Lys	Pro	Leu	Gly	Val	Arg	Thr	Tyr	Asp
	210					215					220				

<210> 7455

<211> 65

<212> PRT

<213> S.epidermidis

<400> 7455

Leu	Lys	Phe	Leu	Arg	Arg	Arg	Ile	Tyr	Leu	Ser	Leu	Lys	Glu	Ile	Trp
1				5					10					15	
Lys	Val	Leu	Ile	Asn	Lys	Lys	Trp	Gln	Thr	Glu	Glu	Ile	Cys	Tyr	Leu
			20					25					30		

Ile Leu Tyr Ile Phe Leu Ala Ser Ile Phe Thr Thr Pro Leu Phe Gly
 35 40 45
 Ile Pro Leu Gly Val Leu Ala Tyr Leu Tyr Leu Asn Glu Glu Ile Leu
 50 55 60
 Lys
 65

<210> 7456
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 7456
 Cys Leu Leu Leu Ile Gln Val Lys Thr Tyr Phe Thr His Phe Leu Ile
 1 5 10 15
 Ser Ile Asn Leu Leu Leu Val Leu Lys Ile Pro Tyr Tyr Tyr Ser Ile
 20 25 30
 Glu Asn His Ile Asp Gly Val Tyr Asn Leu Asn Thr Arg Pro Lys Ser
 35 40 45
 Tyr Lys Cys Ile Lys Leu
 50

<210> 7457
 <211> 59
 <212> PRT
 <213> S.epidermidis

<400> 7457
 Phe Ser Leu Leu Val Phe Ile Lys Leu Tyr Glu Arg Ala Leu Phe Phe
 1 5 10 15
 Lys Tyr Phe Asn Val Lys Leu His Ile Asn Thr Lys Tyr Phe Gly Glu
 20 25 30
 Thr Leu Glu Gly Thr Gly Gln Val Glu Asp Tyr Arg Leu Lys Leu Ser
 35 40 45
 Ala Lys Lys Pro Ser Gln Gln Tyr Lys Val Leu
 50 55

<210> 7458
 <211> 176
 <212> PRT
 <213> S.epidermidis

<400> 7458
 Leu Gln Leu Phe Arg Leu Ser Val Arg Ser Gln Phe Gln Asp Ser Ser
 1 5 10 15
 Gly Lys Asp Val Ser Ser Met Glu Ile Ile Lys Asp Ile Val Ser Leu
 20 25 30
 Ile Ala Ser Ile Leu Ile Phe Leu Gly Ser Ile Ile Ala Leu Ile Ser
 35 40 45
 Ala Ile Gly Ile Val Lys Phe Gln Asp Val Phe Leu Arg Ser His Ala
 50 55 60
 Ser Thr Lys Ser Ser Thr Leu Ser Val Leu Leu Thr Val Val Gly Val
 65 70 75 80
 Leu Ile Tyr Phe Ile Val Asn Ser Gly Phe Phe Ser Val Arg Leu Leu
 85 90 95
 Leu Ser Leu Val Phe Ile Asn Leu Thr Ser Pro Val Gly Met His Leu

<210> 7461
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 7461
 Leu Lys Ser Phe Trp Ala Phe Tyr Tyr His Thr Val Leu Tyr Leu Phe
 1 5 10 15
 Ile Lys Asp Ser Thr Thr Arg Leu Ile Tyr Tyr Tyr Ser Phe Thr Asn
 20 25 30
 Ile Ile Tyr Asn Leu Val Lys Ile Val Ser His Asn Ile Glu Glu
 35 40 45
 Met Leu
 50

<210> 7462
 <211> 309
 <212> PRT
 <213> S.epidermidis

<400> 7462
 Ile Gly Thr Leu Lys Ile Ile Cys Glu Arg Val Met Leu Gln Met Lys
 1 5 10 15
 Ser Lys Leu Trp Ile Val Ile Cys Ala Leu Ile Val Val Leu Ala Ala
 20 25 30
 Cys Gly Gln Asp Ala Asn His Ser Ser Asn Asn Lys Asp Thr Glu Lys
 35 40 45
 Ser Asp Lys Lys Tyr His Arg Ile Ile Ser Leu Ile Pro Ser Asn Thr
 50 55 60
 Glu Ile Leu Tyr Arg Leu Gly Ile Gly Glu Asp Ile Val Gly Val Ser
 65 70 75 80
 Thr Val Asp Asp Tyr Pro Lys Asp Val Lys Lys Gly Lys Lys Gln Phe
 85 90 95
 Asp Ala Met Asn Leu Asn Lys Glu Glu Leu Ile Lys Ala Lys Pro Asp
 100 105 110
 Leu Ile Leu Ala His Glu Ser Gln Lys Asn Ser Ala Gly Lys Val Leu
 115 120 125
 Lys Ser Leu Lys Asp Lys Gly Val Lys Val Val Tyr Val Lys Asp Ala
 130 135 140
 Gln Ser Ile Asp Glu Thr Tyr Asp Thr Phe Lys Ser Ile Gly Gln Leu
 145 150 155 160
 Thr Asp Arg Glu Lys Gln Ala Lys Glu Leu Val Asp Glu Thr Lys His
 165 170 175
 Asn Val Glu Lys Ile Ile Asn Ser Val Pro Lys His His Lys Lys Gln
 180 185 190
 Glu Val Phe Met Glu Val Ser Ser Lys Pro Asp Ile Tyr Thr Ala Gly
 195 200 205
 Lys Asp Thr Phe Phe Asn Asp Met Leu Glu Lys Leu Asp Ala Lys Asn
 210 215 220
 Ser Phe Asp Asp Val Lys Gly Trp Lys Ser Val Ser Lys Glu Ser Ile
 225 230 235 240
 Ile Lys Arg Asn Pro Asp Ile Leu Ile Ser Thr Glu Gly Lys Ser Lys
 245 250 255
 Ser Asp Tyr Ile Glu Met Ile Lys Lys Arg Gly Gly Phe Asp Lys Ile
 260 265 270
 Asn Ala Val Lys Asn Thr Arg Ile Glu Thr Val Asp Gly Asp Glu Val

275 280 285
 Ser Arg Pro Gly Pro Arg Ile Asp Glu Gly Leu Lys Asp Leu Arg Asp
 290 295 300
 Asp Ile Tyr Lys Lys
 305

<210> 7463
 <211> 69
 <212> PRT
 <213> S.epidermidis

<400> 7463
 Pro Met Thr Leu Leu Trp Leu Ala Ile Leu Ile Leu Leu Thr Val Leu
 1 5 10 15
 Gly Lys Lys Met Ser Asn Gln Ala Ile Lys Asn Asn Gln Val Leu Ile
 20 25 30
 Ala Lys Leu Ile Ala Thr Ile Thr Thr Phe Cys Ala Phe Val Leu Val
 35 40 45
 Tyr Leu Leu Met Gln Ser Ile Met Pro His Ile Ile Lys Leu Met Asn
 50 55 60
 Val Phe Tyr His His
 65

<210> 7464
 <211> 52
 <212> PRT
 <213> S.epidermidis

<400> 7464
 Lys Leu Gln Leu Ile Phe Glu Ile Asp Leu Ile Asn Arg Tyr Phe Lys
 1 5 10 15
 Val Gly Val Asp Lys Ser Val Ser Met Ile Leu Ser Leu Ile Ile Phe
 20 25 30
 Asn Lys Ile Met Arg His Leu Cys Lys Asn Leu Ile Ser Ser Leu Leu
 35 40 45
 Arg Ile Cys Lys
 50

<210> 7465
 <211> 291
 <212> PRT
 <213> S.epidermidis

<400> 7465
 Ser Met Phe Leu Leu Glu Leu Ile Lys Gly Ile Ile Leu Gly Ile Val
 1 5 10 15
 Glu Gly Leu Thr Glu Phe Ala Pro Val Ser Ser Thr Gly His Met Ile
 20 25 30
 Leu Val Asp Asp Met Trp Leu Lys Ser Thr Asn Phe Leu Gly Ser Gln
 35 40 45
 Ser Ala Phe Thr Phe Lys Val Val Ile Gln Leu Gly Ser Val Phe Ala
 50 55 60
 Ala Ala Trp Val Phe Arg Glu Arg Phe Leu Glu Ile Leu His Ile Gly
 65 70 75 80
 Gln His Lys Pro Glu Pro Ser Thr Ser Gly Asp Arg Arg Ser Lys Pro
 85 90 95

Arg Arg Leu Asn Leu Ile His Val Leu Val Gly Met Val Pro Ala Gly
 100 105 110
 Ile Leu Gly Phe Leu Phe Asp Asp Leu Ile Glu Lys Tyr Leu Phe Ser
 115 120 125
 Val Pro Thr Val Leu Ile Gly Leu Phe Ile Gly Ala Ile Tyr Met Ile
 130 135 140
 Ile Ala Asp Lys Tyr Ser Lys Thr Val Gln His Pro Gln Thr Val Asp
 145 150 155 160
 Gln Ile Asn Tyr Phe Gln Ala Phe Val Ile Gly Ile Ser Gln Ala Ile
 165 170 175
 Ala Met Trp Pro Gly Phe Ser Arg Ser Gly Ser Thr Ile Ser Thr Gly
 180 185 190
 Val Leu Met Lys Leu Asn His Lys Ala Ala Ser Asp Phe Thr Phe Ile
 195 200 205
 Met Ser Val Pro Ile Met Leu Ala Ala Ser Gly Leu Ser Leu Leu Lys
 210 215 220
 His Tyr Glu Tyr Ile His Leu Ala His Ile Pro Phe Tyr Ile Leu Gly
 225 230 235 240
 Phe Leu Ala Ala Phe Ile Val Gly Leu Ile Ala Ile Lys Thr Phe Leu
 245 250 255
 His Leu Ile Asn Lys Val Lys Leu Val Pro Phe Ala Ile Tyr Arg Ile
 260 265 270
 Val Leu Val Ile Phe Ile Ala Ile Leu Tyr Phe Gly Phe Gly Ile Gly
 275 280 285
 Lys Gly Ile
 290

<210> 7466

<211> 117

<212> PRT

<213> S.epidermidis

<400> 7466

Leu Ile Lys Phe Tyr Gln Tyr Pro Lys Cys Thr Thr Cys Lys Lys Ala
 1 5 10 15
 Ala Lys Phe Leu Asp Glu His Asp Val Asn Tyr Glu Ser Ile Asp Ile
 20 25 30
 Val Gln His Thr Pro Thr Lys Lys Glu Phe Lys Asn Ile Val Asp Lys
 35 40 45
 Thr Gly Val Asn Ile Asn Lys Leu Phe Asn Thr His Gly Ile Lys Tyr
 50 55 60
 Arg Glu Leu Asn Leu Lys Glu Lys Leu Lys Asn Met Ser Asp Asp Glu
 65 70 75 80
 Lys Leu Glu Leu Leu Ala Ser Asp Gly Met Leu Val Lys Arg Pro Leu
 85 90 95
 Ala Ile Ser Gly Asn His Leu Thr Leu Gly Phe Lys Glu Asn Glu Tyr
 100 105 110
 Gln His Gln Trp Leu
 115

<210> 7467

<211> 55

<212> PRT

<213> S.epidermidis

<400> 7467

Ser Pro Lys Phe Ser Val Glu Val Lys Glu Ile Asn Thr Gly Ile Asn
 1 5 10 15
 Ala Glu Ala Lys Leu Val Ala Leu Ala Lys Pro Lys Cys Ile Asn Ile
 20 25 30
 Leu Asn Lys Val Ile Asn Ala Ile Val Ala Met Ile Gly Lys Cys Leu
 35 40 45
 Arg Pro Ile Lys Pro Asn Val
 50 55

<210> 7468
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7468
 Lys Ala Lys Leu Arg Ile Leu Ile Glu Met Phe Tyr Arg Asp Asn Lys
 1 5 10 15
 Leu Val Phe Glu Leu Pro Val Glu Asn Leu Thr Lys Gly Leu Asn Ile
 20 25 30
 Asn Leu Val Ile Asn Lys Lys Ala
 35 40

<210> 7469
 <211> 98
 <212> PRT
 <213> S.epidermidis

<400> 7469
 Met Asn Lys Leu Lys Asp Ile Glu Asp Ile Thr Val Asn Phe Asn Lys
 1 5 10 15
 Glu Lys His Leu Ile Phe Gly Tyr Thr Pro Met Cys Gly Thr Cys Lys
 20 25 30
 Ile Ser Glu Arg Met Leu Asp Ile Ala Asn Glu Ile Leu Gln Leu Pro
 35 40 45
 Ile Lys Lys Ile Asp Leu Asn Phe Tyr Pro Glu Trp Ser Lys Glu Lys
 50 55 60
 Gln Ile Met Ser Val Pro Val Leu Leu Leu Met Arg Arg Glu Glu Glu
 65 70 75 80
 Ile Lys Arg Ile Tyr Ala Phe Gln Ser Val Thr Tyr Leu Leu Glu Asn
 85 90 95
 Leu Lys

<210> 7470
 <211> 59
 <212> PRT
 <213> S.epidermidis

<400> 7470
 Phe Asn Lys Phe Asn Asp His Tyr Pro Leu Leu Asp Tyr Ile Arg Phe
 1 5 10 15
 Val Asn Thr Ile Asp Leu Tyr Asn Leu Lys Tyr Leu Phe Arg Asn Tyr
 20 25 30
 Asp Tyr Ile Phe Cys Ile Ile Val Leu Ser Val Ser Asp Glu Tyr Leu
 35 40 45
 Ser Pro Lys Pro Lys Val Leu Ser Ile Leu Ile

50

55

<210> 7471

<211> 325

<212> PRT

<213> S.epidermidis

<400> 7471

```

Leu Met Lys Phe Ile Phe Lys Gly Tyr Thr Leu Phe Ile Leu Leu Val
1      5      10      15
Ile Leu Thr Ile Val Ser Leu Phe Ile Gly Val Ser Gln Leu Ser Leu
20      25      30
Ile Asp Ile Phe His Leu Ser Asp Glu Gln Ile Asn Ile Leu Phe Ser
35      40      45
Ser Arg Ile Pro Arg Thr Val Ser Ile Leu Leu Ser Gly Ser Ser Leu
50      55      60
Ala Leu Ser Gly Leu Ile Met Gln Gln Met Met Gln Asn Lys Phe Val
65      70      75      80
Ser Pro Thr Thr Ala Gly Thr Met Glu Trp Ala Lys Leu Gly Ile Leu
85      90      95
Met Ser Leu Leu Phe Phe Pro Asn Gly Pro Ile Leu Ile Lys Leu Leu
100     105     110
Phe Ala Val Val Leu Ser Ile Val Gly Thr Phe Leu Phe Val Gln Leu
115     120     125
Ile Asn Leu Ile Arg Val Lys Asp Val Ile Phe Val Pro Leu Leu Gly
130     135     140
Ile Met Ile Gly Gly Ile Leu Ser Ser Phe Thr Thr Phe Val Ala Leu
145     150     155     160
Arg Thr Asn Ala Leu Gln Ser Ile Gly Asn Trp Leu Thr Gly Asn Phe
165     170     175
Ala Val Ile Thr Ser Gly Arg Phe Glu Val Leu Tyr Leu Thr Ile Pro
180     185     190
Leu Leu Ile Leu Ala Phe Val Phe Ala Asn His Phe Thr Ile Ala Gly
195     200     205
Met Gly Lys Asp Phe Ser His Asn Leu Gly Val Ser Tyr Glu Lys Ile
210     215     220
Ile Lys Ile Ala Leu Phe Ile Thr Ala Thr Leu Thr Ala Leu Val Val
225     230     235     240
Val Thr Val Gly Thr Leu Pro Phe Leu Gly Leu Ile Val Pro Asn Ile
245     250     255
Ile Ser Ile Tyr Arg Gly Asp His Leu Lys Asn Ala Leu Pro His Thr
260     265     270
Leu Met Leu Gly Ala Ile Phe Val Leu Ile Ala Asp Ile Ile Gly Arg
275     280     285
Ile Ile Val Tyr Pro Tyr Glu Ile Asn Ile Gly Leu Thr Ile Gly Val
290     295     300
Phe Gly Thr Ile Ile Phe Leu Ile Leu Leu Met Lys Gly Arg Lys Asn
305     310     315     320
Tyr Ala Asn Glu Arg
325

```

<210> 7472

<211> 449

<212> PRT

<213> S.epidermidis

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400

<400> 7472

Leu Glu Thr Ser Thr Ile Ile Ser Leu Val Ile Phe Phe Leu Leu Ile
 1 5 10 15
 Ala Leu Thr Thr Val Phe Val Gly Ser Glu Phe Ala Leu Val Lys Val
 20 25 30
 Arg Ser Thr Arg Ile Glu Gln Leu Val Asp Glu Gly Asn Lys Ser Ala
 35 40 45
 Lys Ile Val Lys Lys Met Ile Asp Asn Leu Asp Tyr Tyr Leu Ser Ala
 50 55 60
 Cys Gln Leu Gly Ile Thr Val Thr Ser Leu Gly Leu Gly Trp Leu Gly
 65 70 75 80
 Glu Pro Thr Phe Glu Lys Met Met His Pro Leu Phe Glu Leu Leu His
 85 90 95
 Leu Pro Ser Pro Leu Thr Thr Thr Ile Ser Phe Val Val Ser Phe Ile
 100 105 110
 Val Val Thr Tyr Leu His Val Val Leu Gly Glu Leu Ala Pro Lys Ser
 115 120 125
 Phe Ala Ile Gln His Thr Glu Gln Leu Ala Leu Leu Tyr Ser Arg Pro
 130 135 140
 Leu Phe Tyr Phe Gly Asn Phe Met Lys Pro Leu Ile Trp Leu Met Asn
 145 150 155 160
 Gly Ser Ser Arg Val Ile Val Arg Met Phe Gly Phe Asp Pro Asp Ala
 165 170 175
 Gln Thr Asp Ala Met Ser Glu Glu Glu Ile Lys Ile Ile Ile Asn Asn
 180 185 190
 Ser Tyr Asn Gly Gly Glu Ile Asn Gln Thr Glu Leu Ala Tyr Met Gln
 195 200 205
 Asn Ile Phe Ser Phe Asp Glu Arg His Ala Lys Asp Ile Met Val Pro
 210 215 220
 Arg Thr Gln Met Val Thr Leu Asn Glu Pro Phe Asn Val Asp Glu Leu
 225 230 235 240
 Leu Asp Thr Ile Lys Glu His Gln Phe Thr Arg Tyr Pro Ile Thr Glu
 245 250 255
 Asp Gly Asp Lys Asp His Val Lys Gly Phe Ile Asn Val Lys Glu Phe
 260 265 270
 Leu Thr Glu Tyr Ala Ser Gly Lys Pro Ile Lys Ile Ala Asn Tyr Ile
 275 280 285
 His Glu Leu Pro Met Ile Ser Glu Thr Thr Arg Ile Ser Asp Ala Leu
 290 295 300
 Val Arg Met Gln Arg Glu His Val His Ile Ser Leu Ile Ile Asp Glu
 305 310 315 320
 Tyr Gly Gly Thr Ala Gly Ile Leu Thr Met Glu Asp Ile Leu Glu Glu
 325 330 335
 Ile Val Gly Glu Ile Arg Asp Glu Phe Asp Asp Asp Glu Val Asn Asp
 340 345 350
 Ile Val Lys Leu Asp Asp His Thr Tyr Gln Ile Asn Gly Arg Val Leu
 355 360 365
 Leu Asp Asp Leu Asn Glu Lys Phe Gly Ile Glu Phe Glu Asp Ser Glu
 370 375 380
 Asp Ile Asp Thr Ile Gly Gly Trp Leu Gln Ser Gln Asn Thr Asn Leu
 385 390 395 400
 Gln Lys Asp Asp Phe Val Asp Thr Glu Tyr Asp Arg Trp Thr Ile Thr
 405 410 415
 Glu Ile Asp Asn His Gln Ile Ile Trp Val Asn Leu Asn Tyr Glu Phe
 420 425 430
 Asn Ser Gly Arg Pro Ser Val Asn Glu Glu Gln Glu Asp Asp Glu Arg

435 440 445
 Asp

 <210> 7473
 <211> 502
 <212> PRT
 <213> S.epidermidis

 <400> 7473
 Phe Met Thr Ser Asn Lys Ser His Glu Lys Ala Val Gln Glu Ile Pro
 1 5 10 15
 Gln His Gly Phe Phe Gly His Pro Lys Gly Leu Gly Val Leu Phe Phe
 20 25 30
 Val Glu Phe Trp Glu Arg Phe Ser Tyr Tyr Gly Met Arg Ala Met Leu
 35 40 45
 Ile Phe Tyr Met Tyr Phe Ala Leu Gln Glu Asn Gly Leu Gly Met Asp
 50 55 60
 Lys Thr Thr Ala Met Ser Ile Met Ser Val Tyr Gly Ser Leu Ile Tyr
 65 70 75 80
 Met Ser Ser Ile Pro Gly Gly Trp Ile Ala Asp Arg Ile Thr Gly Thr
 85 90 95
 Arg Gly Ala Thr Leu Ile Gly Ala Ile Leu Ile Ile Ile Gly His Ile
 100 105 110
 Cys Leu Ser Leu Pro Phe Ala Met Val Gly Leu Phe Thr Ser Met Phe
 115 120 125
 Phe Ile Ile Val Gly Ser Gly Leu Met Lys Pro Asn Ile Ser Asn Ile
 130 135 140
 Val Gly Arg Leu Tyr Pro Glu Asn Asp Val Arg Met Asp Ala Gly Phe
 145 150 155 160
 Val Ile Phe Tyr Met Ser Val Asn Met Gly Ala Leu Val Ser Pro Ile
 165 170 175
 Ile Leu Gln His Tyr Ile Asp Ile Arg Asn Phe His Gly Gly Phe Leu
 180 185 190
 Ile Ala Ala Ile Gly Met Ala Leu Gly Leu Val Trp Tyr Leu Leu Phe
 195 200 205
 Asn Arg Lys Thr Leu Gly Ser Ile Gly Met Lys Pro Thr Asn Pro Leu
 210 215 220
 Ser Ser Ser Glu Lys Lys Lys Tyr Gly Thr Ile Ile Gly Ile Val Val
 225 230 235 240
 Ile Ala Ile Val Leu Ile Leu Met Ile Ala Tyr Phe Thr His Thr Leu
 245 250 255
 Ser Phe Asn Leu Ile Ser Asn Thr Val Leu Ile Leu Gly Ile Ala Leu
 260 265 270
 Pro Ile Ile Tyr Phe Thr Thr Met Ile Arg Ser Lys Glu Val Thr Asp
 275 280 285
 Thr Glu Arg Ser Arg Val Lys Ala Phe Ile Pro Leu Phe Ile Leu Gly
 290 295 300
 Met Leu Phe Trp Ser Ile Gln Glu Gln Gly Ser Asn Val Leu Asn Ile
 305 310 315 320
 Tyr Gly Ile Glu Asn Ser Asp Met Lys Leu Asn Leu Phe Gly Trp Lys
 325 330 335
 Thr His Phe Gly Glu Ala Ile Phe Gln Thr Ile Asn Pro Leu Phe Ile
 340 345 350
 Leu Leu Phe Ala Pro Val Val Thr Leu Leu Trp Gln Lys Leu Gly Lys
 355 360 365

Lys Gln Pro Ser Leu Pro Ile Lys Phe Ala Ile Gly Thr Ile Leu Ala
 370 375 380
 Gly Ala Ser Tyr Ile Leu Met Gly Ala Ile Gly His Ile Tyr Gly Asp
 385 390 395 400
 Thr Gln Phe Ser Val Asn Trp Val Ile Leu Ser Tyr Val Ile Cys Val
 405 410 415
 Ile Gly Glu Leu Cys Leu Ser Pro Thr Gly Ser Ser Ala Ala Val Lys
 420 425 430
 Leu Ala Pro Lys Ala Phe Asn Ala Gln Met Met Ser Leu Trp Leu Leu
 435 440 445
 Thr Asn Ala Ser Ala Gln Ala Ile Asn Gly Thr Leu Val Lys Leu Ile
 450 455 460
 Lys Pro Leu Gly Gln Thr Asn Tyr Phe Ile Phe Leu Gly Val Val Ala
 465 470 475 480
 Thr Val Ile Thr Leu Ile Ile Leu Ala Phe Ile Pro Lys Ile Ser Lys
 485 490 495
 Ala Met Lys Gly Ile Arg
 500

<210> 7474
 <211> 135
 <212> PRT
 <213> S.epidermidis

<400> 7474
 Tyr Asn Glu Phe Val Ile Lys Val Lys Lys Leu Trp Glu Val Phe Tyr
 1 5 10 15
 Met Pro Thr Val Ile Leu Thr Glu Ala Ala Phe Glu Val Arg Asp
 20 25 30
 Met Leu Lys Asn Asn Asp Met Ser Asp Gly Tyr Leu Lys Ile Lys Val
 35 40 45
 Asn Gly Gly Gly Cys Thr Gly Leu Thr Tyr Gly Met Ser Ala Glu Ala
 50 55 60
 Glu Pro Gly Glu Asn Asp Glu Ile Leu Glu Tyr Tyr Gly Leu Lys Val
 65 70 75 80
 Leu Val Asp Arg Asn Asp Ala Pro Val Leu Asn Gly Thr Thr Ile Asp
 85 90 95
 Phe Lys Gln Ser Leu Met Gly Gly Gly Phe Gln Ile Asn Asn Pro Asn
 100 105 110
 Ala Ile Ala Ser Cys Gly Cys Gly Ser Ser Phe Lys Thr Ala Lys Val
 115 120 125
 Ala Gly Asn Pro Glu Gln Cys
 130 135

<210> 7475
 <211> 50
 <212> PRT
 <213> S.epidermidis

<400> 7475
 Arg Trp Phe Leu Asn Ser Lys Gln Met Tyr Leu Tyr Ser Phe Cys Ile
 1 5 10 15
 Arg Tyr Ser Phe Met Ile Tyr Arg Pro His Asn Phe Arg Tyr Ile Asn
 20 25 30
 Tyr Ile Arg Asp Leu Leu Ser Asn Thr Phe His Tyr Lys His Ile Ile
 35 40 45

Asp Leu
50

<210> 7476

<211> 41

<212> PRT

<213> S.epidermidis

<400> 7476

Asn Met Lys Leu Leu Asp Ile Ile Tyr Ile Met Leu Lys Lys Thr Tyr
1 5 10 15
Thr Lys Asn Phe Ile Asn Leu Leu Ala Arg Cys Ser Ile Trp Leu Ile
20 25 30
Gln Lys Glu Ile Ile Lys Arg Lys Lys
35 40

<210> 7477

<211> 547

<212> PRT

<213> S.epidermidis

<400> 7477

Gly Met Thr Thr Leu Leu Gly Glu Leu Glu Ser Lys Ala Thr Ser Ile
1 5 10 15
Asn Lys Lys Asn Leu Val Ile Gln Asp Phe Asp Thr Lys Cys Pro Asn
20 25 30
Arg Asn Ile Phe Val Val Gly Gly Pro Gly Ser Tyr Lys Ser Ala Gly
35 40 45
Tyr Val Ile Pro Asn Val Ile Val Lys Asn Gln Gln Ser Ile Val Val
50 55 60
Thr Asp Pro Ser Gly Glu Val Tyr Glu Lys Thr Ser Asn Ile Lys Arg
65 70 75 80
Met Gln Gly Phe Asp Val Arg Val Val Asn Phe Lys Asn Phe Leu Ala
85 90 95
Ser Asp Arg Gln Asn Phe Phe Asp Tyr Ile Asp Lys Asp Ser Asp Cys
100 105 110
Ser Ile Val Ala Glu Leu Ile Ile Lys Ser Ala Gly Asp Ser Lys Ile
115 120 125
Asn Lys Asp Val Trp Tyr Lys Ala Ser Val Gly Leu Leu Asn Ser Leu
130 135 140
Leu Leu Tyr Ala Lys Tyr Glu Phe Glu Pro Glu Lys Arg Thr Ile Gly
145 150 155 160
Asn Ile Ile Lys Phe Ile Gln Asn Asn Lys Pro Asn Gln Asp Glu Glu
165 170 175
Gly Ser Val Glu Leu Asp Lys Arg Phe Asn Glu Leu Ser Lys Asp His
180 185 190
Pro Ala Arg Glu Ser Tyr Glu Phe Gly Phe Ala Val Ser Glu Gly Arg
195 200 205
Thr Arg Ala Ser Ile Ile Leu Thr Phe Val Ala Asp Leu Arg Asn Tyr
210 215 220
Ile Asp Asn Glu Ile Arg Ser Tyr Thr Ser Asp Ser Asp Phe Asp Leu
225 230 235 240
Arg Asp Val Gly Leu Arg Lys Thr Ile Ile Tyr Val Met Leu Pro Val
245 250 255
Leu Gly Asn Thr Val Gln Ser Leu Ser Ser Leu Phe Phe Ser Gln Met
260 265 270

```

Phe Gln Gln Leu Tyr Arg Leu Gly Asp Glu Asn Gly Ala Arg Leu Pro
      275      280      285
Val Pro Val Asp Phe Leu Leu Asp Glu Trp Pro Asn Ile Gly Ala Ile
      290      295      300
Pro Asp Tyr Glu Glu Thr Leu Ala Thr Cys Arg Lys Tyr Gly Ile Ser
305      310      315      320
Ile Thr Thr Ile Val Gln Ser Ile Ser Gln Ala Val Asp Lys Tyr Asn
      325      330      335
Lys Asp Lys Ala Asn Ala Ile Ile Gly Asn His Ala Val Ile Leu Cys
      340      345      350
Leu Gly Asn Val Asn Asn Asp Thr Ala Lys Tyr Ile Lys Glu Glu Leu
      355      360      365
Gly Asn Ala Thr Val Glu Phe Glu Thr Ser Ser Glu Gly Ser Ser Ser
      370      375      380
Gly Lys Asp Ser Arg Ser Lys Ser Ser Asn Lys Asn Val Ser Tyr Thr
385      390      395      400
Gly Arg Ala Leu Leu Asn Glu Asp Glu Ile Ser Asn Met Gln Gln Asp
      405      410      415
Lys Ala Ile Leu Ile Thr Lys Asn Arg Asn Pro Lys Ile Ile Lys Lys
      420      425      430
Leu Ala Tyr Phe Lys Met Phe Pro Asn Leu Thr Glu Thr Tyr Ile Ala
      435      440      445
Pro Gln Asn Glu Tyr Lys Arg Lys Lys Asn Gln Ser Met Ile Asp Lys
      450      455      460
His Asn Arg Leu Arg Glu Glu Trp Asp Lys Lys Gln Glu Lys Asn Lys
465      470      475      480
Gln Gln Lys Leu Glu Glu Tyr Lys Glu Glu Gln Arg Gln Lys Glu Leu
      485      490      495
Glu Lys Glu Gln Gln Pro Gln Glu Glu Gln Gln Asn Glu Lys Val Lys
      500      505      510
Glu Ser Lys Asp Lys Asn Asp Gln Glu Asp Lys Lys Asp Glu Gln Gln
      515      520      525
Lys Ile Asn Asp Ser Lys Lys Ala Phe Tyr Glu Lys Leu Lys Gln Lys
      530      535      540
Gln Ala Lys
545

```

<210> 7478

<211> 55

<212> PRT

<213> S.epidermidis

<400> 7478

```

Met Lys Val Thr Asn Thr Ile Arg Phe Glu Glu Glu Lys Lys Asn Leu
1      5      10      15
Ile Asp Asn Val Val Asn Thr Leu Glu Glu Tyr Lys Asp Val Ile Asp
      20      25      30
Ser Glu Leu Arg Thr Ile Arg Asn Thr Asn His Leu Val Met Arg Asn
      35      40      45
Asn Leu Val Leu Leu Gln Ser
50      55

```

<210> 7479

<211> 1026

<212> PRT

<213> S.epidermidis

Leu Glu Asn Met Val Asp Trp Asn Ile Gly Arg Asn Arg Tyr Trp Gly
 435 440 445
 Thr Pro Leu Asn Val Trp Ile Cys Asn Asp Cys Asn His Glu Tyr Ala
 450 455 460
 Pro Ser Ser Ile Lys Asp Leu Gln Asn Asn Ser Ile Asn Lys Ile Asp
 465 470 475 480
 Glu Asp Ile Glu Leu His Arg Pro Tyr Val Asp Asn Ile Thr Leu Ser
 485 490 495
 Cys Pro Lys Cys Asn Gly Lys Met Ser Arg Val Glu Glu Val Ile Asp
 500 505 510
 Val Trp Phe Asp Ser Gly Ser Met Pro Phe Ala Gln His His Tyr Pro
 515 520 525
 Phe Asp Asn Gln Lys Ile Phe Asn Gln His Phe Pro Ala Asp Phe Ile
 530 535 540
 Ala Glu Gly Val Asp Gln Thr Arg Gly Trp Phe Tyr Ser Leu Leu Val
 545 550 555 560
 Ile Ser Thr Ile Leu Lys Gly Lys Ser Ser Tyr Lys Arg Ala Leu Ser
 565 570 575
 Leu Gly His Ile Leu Asp Ser Asn Gly Lys Lys Met Ser Lys Ser Lys
 580 585 590
 Gly Asn Val Ile Asn Pro Thr Glu Leu Ile Asn Lys Tyr Gly Ala Asp
 595 600 605
 Ser Leu Arg Trp Ala Leu Ile Ser Asp Ser Ala Pro Trp Asn Asn Lys
 610 615 620
 Arg Phe Ser Glu Asn Ile Val Ala Gln Thr Lys Ser Lys Phe Ile Asp
 625 630 635 640
 Thr Leu Asp Asn Ile Tyr Lys Phe Tyr Asn Met Tyr Asn Lys Ile Asp
 645 650 655
 His Tyr Asn Pro Asn Asn Glu Ile Thr Lys Ser Arg Asn Thr Leu Asp
 660 665 670
 Asn Trp Ala Leu Ser Arg Leu Asn Thr Leu Ile Lys Glu Ser Asn Ile
 675 680 685
 Tyr Val Asn Asn Tyr Asp Phe Thr Ser Ala Ala Arg Leu Ile Asn Glu
 690 695 700
 Tyr Thr Asn Thr Ile Ser Asn Trp Tyr Ile Arg Arg Ser Arg Gly Arg
 705 710 715 720
 Phe Trp Glu Gln Gly Ile Ser Asn Asp Lys Lys Asp Ala Tyr Asn Thr
 725 730 735
 Leu Tyr Glu Ile Leu Thr Thr Leu Ser Arg Leu Val Ala Pro Phe Val
 740 745 750
 Pro Phe Ile Ser Glu Lys Ile His Tyr Asn Leu Thr Gly Lys Ser Val
 755 760 765
 His Leu Gln Asp Tyr Pro Gln Tyr Lys Glu Ser Phe Ile Asn Gln Ala
 770 775 780
 Leu Glu Asp Glu Met His Thr Val Ile Lys Ile Val Glu Leu Ser Arg
 785 790 795 800
 Gln Ala Arg Lys Asn Ala Asp Leu Lys Ile Lys Gln Pro Leu Ser Lys
 805 810 815
 Met Val Ile Lys Pro Asn Ser Gln Leu Asn Leu Ser Phe Leu Pro Asn
 820 825 830
 Tyr Tyr Ser Ile Ile Lys Asp Glu Leu Asn Ile Lys Asn Ile Glu Leu
 835 840 845
 Thr Asp Asn Ile Asn Asp Tyr Ile Thr Tyr Glu Leu Lys Leu Asn Phe
 850 855 860
 Ser Ser Val Gly Pro Lys Leu Gly Asn Lys Thr Lys Asn Ile Gln Thr
 865 870 875 880

<210> 7481
 <211> 160
 <212> PRT
 <213> S.epidermidis

<400> 7481

```

Tyr Ser Tyr Phe Thr Leu Tyr Phe Tyr Glu His Met Phe Tyr Asn Leu
1      5      10      15
Val Glu Val Phe Thr Asp Met Lys Ile Ile Asn Pro Asn Met Pro Glu
20      25      30
Pro Tyr Lys Tyr Glu Thr Asp Tyr Arg Asn Ile Pro Arg Glu Tyr Leu
35      40      45
Asn Pro His Ile Pro Lys Gly Arg Gly Ile Val Lys Trp Asn Ala Phe
50      55      60
Lys Thr Ile Pro Gln Gln Tyr Glu Ile Leu Glu Gln His Ile Glu Asp
65      70      75      80
Gln Asn Lys Ile Asn Met Pro Leu Leu Ser Asp Asp Gln Leu Gln Glu
85      90      95
Ile Asn Glu Lys Val Ser Ser Lys Ile Ser Lys Asn Ile Leu Thr Asp
100     105     110
Leu Asp Tyr Trp Lys Asp Gly Tyr Ile Tyr Ser Ile Gln Cys Tyr Ile
115     120     125
Asn Lys Ile Asp Glu Phe Asn Gly Phe Met Ile Ile Thr Asn Ser Asn
130     135     140
Ser Asn Asn Lys Leu Lys Ile Pro Leu Ser Ser Ile Val Ser Val Gln
145     150     155     160

```

<210> 7482
 <211> 54
 <212> PRT
 <213> S.epidermidis

<400> 7482

```

Lys Phe Pro Tyr Tyr Ile Lys Gln Thr Trp Pro Leu Tyr Phe Ser Arg
1      5      10      15
Val Ala Met Ser Tyr Gln Ser Gln Ala Lys Gly Asp Lys Leu Cys Ile
20      25      30
Ile Leu Ile Ile Leu Asn Tyr Gln Leu Lys Ile Phe Lys Lys Tyr Phe
35      40      45
Leu Leu Gln Gly Asp Met
50

```

<210> 7483
 <211> 575
 <212> PRT
 <213> S.epidermidis

<400> 7483

```

Tyr Met Ala Tyr Ser Lys Gly Asn Tyr Lys Lys Lys Lys Ile Asp Ser
1      5      10      15
Ile Ile Glu Glu Leu Asn Asn Lys Leu Asp Asp Phe Lys Asn Asn Asp
20      25      30
Lys Thr Tyr Lys Glu Phe Leu Asp Thr Thr Ala Lys Phe His Asn Tyr
35      40      45
Ser Ile Asn Asn Ile Ile Leu Ile Ala Gly Gln Asn Pro Glu Ala Thr
50      55      60

```


Ala	Val	Ala	Gly	Tyr	Lys	Ala	Trp	Lys	Asn	Lys	Phe	Asp	Arg	Gln	Val
65					70				75					80	
Gln	Lys	Gly	Ala	Lys	Ser	Met	Asn	Ile	Ile	Ala	Pro	Ile	Val	Gln	Lys
				85					90					95	
Arg	Asn	Val	Glu	Ile	Lys	Asp	Asp	Asn	Gly	Asn	Ile	Val	Arg	Asp	Asn
			100					105					110		
Asn	Gly	Asn	Pro	Lys	Thr	Glu	Arg	Lys	Pro	Val	Ile	Thr	Gly	Tyr	Arg
		115					120					125			
Ala	His	Asn	Val	Phe	Asp	Val	Ala	Asp	Thr	Lys	Gly	Lys	Pro	Leu	Ile
	130					135					140				
Thr	Ala	Lys	Asp	Leu	Ile	Lys	Thr	Glu	Phe	Glu	Asn	Ser	Asn	Asp	Tyr
145					150					155					160
Lys	Asp	Leu	Tyr	Asn	Glu	Phe	Lys	Asp	Tyr	Ile	Asn	Glu	Glu	Leu	Thr
				165					170					175	
Pro	Ser	Val	Glu	Glu	Lys	His	Phe	Leu	Asp	Asp	Pro	Thr	Leu	Ser	Asn
			180					185					190		
Gly	Ala	Lys	Gly	Tyr	Tyr	Ser	Pro	Lys	Ser	Asp	Glu	Ile	Val	Ile	Ser
		195					200					205			
Asp	Asp	Leu	Ser	Tyr	Asp	Met	Arg	Phe	Lys	Thr	Leu	Ile	His	Glu	Tyr
	210					215					220				
Ala	His	Ser	Gln	Leu	His	Asn	Asn	Asp	Ile	Gly	Lys	Thr	Gln	Ile	Ser
225					230					235					240
Glu	His	Ser	Arg	Ser	Leu	Lys	Glu	Ile	Glu	Ala	Glu	Ser	Ser	Ala	Tyr
				245					250					255	
Val	Val	Ala	Asn	Tyr	Tyr	Gly	Leu	Asp	Thr	Ser	Asp	Tyr	Ser	Leu	Gly
			260					265					270		
Tyr	Leu	Ser	Gly	Trp	Gly	His	Asn	Ile	Ser	Asp	Asp	Glu	Leu	Lys	Ala
	275						280					285			
His	Ile	Lys	Asn	Ile	His	Ser	Phe	Ala	Lys	Thr	Thr	Ile	Glu	Glu	Ile
	290					295					300				
Asn	Ser	Leu	Pro	Glu	Phe	Ser	Gln	Tyr	Ile	Asp	Lys	Lys	Leu	Glu	Ser
305					310					315					320
Glu	Met	Asn	Lys	Asp	Val	Tyr	Lys	Asp	Leu	Ser	Thr	Met	Ile	Asp	Thr
				325					330					335	
Asn	Leu	Lys	Asn	Gly	Phe	Asp	Lys	Ile	Thr	Ile	Ile	Lys	Gly	Asn	Leu
			340					345					350		
Val	Asn	Asp	Tyr	Gly	Leu	Asn	Glu	Ile	Ser	Glu	Asn	Ser	Tyr	Glu	Asn
		355					360					365			
Asp	Asp	Phe	Lys	Val	Asn	Ile	Asp	Tyr	Lys	Gly	Phe	Asn	Thr	Asn	Asn
	370					375					380				
Ser	Gln	Asp	Gln	Ala	Lys	Ile	Glu	Leu	Ile	Asn	Lys	His	Asp	Asp	Ser
385					390					395					400
Leu	Asn	Arg	Asp	Tyr	Asn	Phe	Thr	Gln	Thr	Tyr	Asn	Arg	Asn	Val	Ile
				405					410					415	
Asn	Asn	Thr	Thr	Thr	Ile	Phe	Val	Gln	Asp	Asp	Asp	Asn	Glu	Asp	Lys
			420					425					430		
Asn	Lys	Lys	Tyr	Ile	His	Glu	Arg	Asp	Ile	Asp	Gly	Asn	Ile	Leu	Glu
		435					440					445			
Glu	Lys	His	Lys	Leu	Ser	Ser	Gln	Asp	Glu	Ile	Val	Ser	Phe	Glu	Asn
	450					455					460				
Phe	Val	Asn	Lys	Ser	Val	Glu	Glu	Asn	Gly	Leu	Lys	Asp	Thr	Leu	Arg
465					470					475					480
Gln	Phe	Val	Ser	Asn	Gly	Val	Leu	Met	Gly	Tyr	Glu	Leu	Asn	Val	Asp
				485					490					495	
Asn	Ile	Asp	Asn	Thr	Asn	Glu	Thr	Tyr	Phe	Ser	Met	Asn	Lys	Asn	Gln
			500					505					510		

Gln Asn Gly Gln Arg Ser Asn Met Thr Ala Lys Leu Glu His Asp Thr
 515 520 525
 Asn Glu Asn Val Tyr Ile Asp Phe Lys Ile Lys Asn Ser Ala Gly Ile
 530 535 540
 Lys Asn Ile Ser Tyr Thr Glu Ser Asn Glu Glu Phe Asn Lys Asp Glu
 545 550 555 560
 Gln Asn Lys Glu Ile Glu Asn Lys Gln Glu Glu Glu Ile Asp Ile
 565 570 575

<210> 7484

<211> 95

<212> PRT

<213> S.epidermidis

<400> 7484

Tyr Met Asp Tyr Thr Asn Gln Lys Arg Lys Tyr Ile Ile Phe Gly Ile
 1 5 10 15
 Val Leu Ala Ile Thr Leu Leu Ile Val Gly Ile Ala Tyr Tyr Leu Ile
 20 25 30
 Ser Leu Asn Asn Ala Lys Gly Gln Val Lys Glu Phe Glu Lys Leu Val
 35 40 45
 Gln His Asn Asp Tyr Asn Ser Ile Ala Lys Lys Leu Ser Asn Lys Glu
 50 55 60
 Glu Thr Leu Ser Glu Asn Asp Ala Lys Asn Phe Val Leu Phe Val Lys
 65 70 75 80
 Ser Lys Glu Asn Gln Glu Gln Tyr Asn Glu Gln Ile Gln Lys Asn
 85 90 95

<210> 7485

<211> 64

<212> PRT

<213> S.epidermidis

<400> 7485

Phe Leu Tyr Leu Arg His Asn Ala Asp Ser Ser Ser Cys Ser Ile Asn
 1 5 10 15
 Phe Tyr Ile Cys Ala Thr Thr Pro Ile Leu Val Arg Val Val Leu Ile
 20 25 30
 Phe Ile Ser Ala Pro Gln Arg Arg Phe Phe Ser Tyr Leu Tyr Tyr Ile
 35 40 45
 Asn Thr Cys His Val Met Gln Cys Leu Gly Leu Leu Phe Lys Leu Ser
 50 55 60

<210> 7486

<211> 111

<212> PRT

<213> S.epidermidis

<400> 7486

Asn Leu Asn Leu Ser Asn Glu Lys Val Ile Ile Lys Leu Ile Lys Asn
 1 5 10 15
 Met Glu Val Leu Phe Met Ala Asp Ile Gln Lys Met Leu Glu Gln Lys
 20 25 30
 Glu Lys Leu Gln Glu Lys Ile Lys Glu Glu Lys Lys Lys Glu Tyr Glu
 35 40 45
 Lys Phe Gly Arg Trp Phe Phe Asn Lys Phe Lys Val Asn Arg Ser Ala

50		55		60											
Asp	Ala	Lys	Lys	Ile	Ile	Asn	Lys	Asn	Leu	Leu	Asn	Ile	Glu	Asp	Thr
65				70					75						80
Lys	Glu	His	Asn	Leu	Glu	Arg	Asn	Glu	Ile	Ile	Glu	Glu	Thr	Lys	Asn
			85						90					95	
Ser	Asn	Glu	Glu	Asn	Lys	Glu	Ile	Asn	Glu	Ile	Asn	His	Asn	Ile	
			100					105					110		

<210> 7487

<211> 46

<212> PRT

<213> S.epidermidis

<400> 7487

Tyr	Thr	Ser	Gln	Pro	Ile	Ile	Thr	Leu	Leu	Arg	Lys	Val	Ile	Ile	Ser
1			5					10					15		
Val	Ile	Asn	Thr	Ile	Val	Tyr	Asn	Thr	Leu	Ile	Ser	Leu	Phe	Ile	Phe
			20					25					30		
Thr	Asn	Ile	Cys	Ser	Ile	Ile	Trp	Leu	Arg	Cys	Leu	Leu	Ile		
			35				40					45			

<210> 7488

<211> 548

<212> PRT

<213> S.epidermidis

<400> 7488

Val	Phe	Ile	Lys	Lys	Arg	Ser	Asp	Leu	Ile	Met	Arg	Phe	Thr	Pro	Arg
1			5					10						15	
Gly	Ile	Leu	Asn	Thr	Asp	Tyr	Glu	Leu	Asn	Ser	Glu	Phe	Tyr	Tyr	
			20				25					30			
Val	Pro	Ala	Ser	Asp	Lys	Gln	Met	Asn	Asp	Gln	Arg	Asp	Met	Thr	Asn
		35					40					45			
Lys	Ser	Ile	Val	Gly	Asn	Leu	Val	Tyr	Arg	Asn	Asn	Phe	Tyr	Asn	Glu
	50				55					60					
Val	Tyr	Thr	Gln	Pro	Val	Tyr	Asp	Leu	Asp	Asp	Ser	Asn	Glu	Lys	Tyr
65			70					75						80	
Gln	Thr	Pro	His	Ile	Ile	Ser	Ile	Asp	Asp	Ser	Glu	Phe	Asp	Tyr	Asn
			85					90					95		
Leu	Thr	Asn	Leu	Asp	Asp	Tyr	Phe	Thr	Lys	Asp	Thr	Ala	Asn	Lys	Gly
			100					105					110		
Tyr	Glu	Lys	Leu	Val	Asn	Ala	Ile	Lys	Ser	Glu	Glu	Ile	Thr	Tyr	Phe
		115					120					125			
Asp	Ser	Asp	Ile	Asn	Glu	Val	Asp	Asp	Phe	Thr	Gln	Gln	Asp	Glu	Tyr
	130					135					140				
Ser	Asn	Asp	Trp	Tyr	Thr	Asn	Thr	Phe	Val	Asp	Leu	Val	Leu	Ser	Met
	145			150					155						160
Lys	Gly	Tyr	Ser	Tyr	His	Val	Glu	Pro	Asn	Arg	Glu	Ser	Val	Ile	Glu
			165					170						175	
Asp	Ser	His	Ile	Ile	Thr	Glu	Asn	Asp	Ile	Thr	Tyr	Asn	Val	Ser	Tyr
		180					185						190		
Asn	Pro	Glu	Lys	His	His	Leu	Tyr	Ile	Asn	Asp	Phe	Pro	Ala	Ile	Pro
	195						200					205			
Ile	Glu	Glu	Asn	Asp	Asn	Ile	Arg	Leu	Leu	Asn	Asp	Asn	Leu	Thr	Gln
	210				215					220					
Asp	Met	Glu	Lys	Thr	Tyr	Asp	Asn	Ile	Asn	Tyr	Asn	Phe	Ser	Tyr	Asn

225 230 235 240
 Asp Phe Lys Thr Leu Glu Asp Asp Ser Tyr Ile Tyr Ile Asp Leu Thr
 245 250 255
 Asp Tyr Lys Asp Asn Glu Gly Lys Phe Val Lys Asn Leu Ile Glu Asp
 260 265 270
 Ile Pro Pro Asn Glu Ile Ile Lys Asp Arg Leu Lys Gln Asn Ile Asn
 275 280 285
 Leu Phe Asp Glu Arg Ala Asn Tyr Asn Ala Leu Ala Val Tyr Arg Arg
 290 295 300
 Asp Leu Glu Asp Phe Ser Asp Arg Asn Asn Leu Asp Ser Leu Asp Lys
 305 310 315
 Val Lys Asp Leu Lys Thr Phe Tyr Asp Thr Glu Ile Asn Ile Lys Gly
 325 330 335
 Leu Asn Ile Asn Asn Asp Ile Glu Lys Lys Ala Leu Asn Asn Gln Leu
 340 345 350
 Ala Phe Asn Leu Tyr Asn Glu Pro Leu Asn Asn Met Phe Arg Asp Asn
 355 360 365
 Asn Val Leu Tyr Glu Val Tyr Glu Lys Glu Ile Tyr Asp Glu Lys Ile
 370 375 380
 Pro Leu Ser Ile Glu Asp Arg Lys Glu Val Lys Thr Tyr Leu Asp Asp
 385 390 395 400
 Ala Arg Asn Asn Phe Ser Asn Asn Phe Tyr Glu Tyr Thr Thr Asn Lys
 405 410 415
 Ser Ser Ile Leu Ala Glu Asn Ser Leu Thr Val Leu Asp Lys Ala Lys
 420 425 430
 Tyr Asp Leu Glu Phe Ala Pro Val Ser Asn His Leu Tyr Lys Glu Arg
 435 440 445
 Glu Asn Phe Tyr Glu Gly Met Lys Gln Ala Thr Leu Pro Leu His Asn
 450 455 460
 Ile Thr Lys Glu Gln Tyr Lys Glu Arg Glu Asn Asp Ile Glu Ile Ile
 465 470 475 480
 Gly His Phe Lys Asn Tyr Ile Asn Thr Glu Leu His Gly Thr Lys Ser
 485 490 495
 Ser Glu Phe Lys Pro Asn Phe Val Asn Asp Ser Leu Glu Asn Glu Thr
 500 505 510
 Asn Ser Ile Ala Phe Glu Asp Ile Ile Asn Gly Ser Glu Glu Thr His
 515 520 525
 Ser Asn Ile Ile Asn Ser Ile Lys Asn Glu Leu Lys Gln Glu Arg Asp
 530 535 540
 Asn Leu Glu Met
 545

<210> 7489

<211> 102

<212> PRT

<213> S.epidermidis

<400> 7489

Lys Thr Tyr Lys Ile Ile Gly Leu Leu Ile Ala Lys Ser Thr Val Val
 1 5 10 15
 Asn Thr Leu Lys Ile Gly Gly Phe Ile Met Ile Leu Leu Ser Thr Ala
 20 25 30
 Gly Glu Asn Ala Val His Ile Asn Pro Ile Phe Arg Phe Phe Leu Tyr
 35 40 45
 Phe Ile Met Cys Val Pro Met Thr Val Ala Leu Cys Thr Ile Phe Leu
 50 55 60

3425

Lys Phe Ile Ser Ile Phe Ile Leu Pro Trp Lys Val Cys Leu Tyr Ile
 65 70 75 80
 Gly Ile Ala Leu Gly Ile Ile Val Thr Ile Phe Leu Leu Val Ile Thr
 85 90 95
 Ile Gly Ile Glu Met Thr
 100

<210> 7490
 <211> 200
 <212> PRT
 <213> S.epidermidis

<400> 7490
 Thr Met Tyr Asn Phe Asp Tyr Ser Lys Leu Pro Ile Lys Asn Ile Gln
 1 5 10 15
 Lys Ile Phe Pro Ile Ala Gly Gly Tyr Val Asn Leu Ser Phe Ser Val
 20 25 30
 Asp Ala Ser Asn Lys Lys Tyr Phe Leu Lys Leu Gln Pro Asn Thr Lys
 35 40 45
 Ser Asn Phe Phe Asp Tyr Glu Leu Ser Ser Leu Lys Glu Leu Thr Asp
 50 55 60
 Lys Asn Ile Pro Val Pro Gln Ile Ile Asn Lys Gly Glu Leu Asp Asn
 65 70 75 80
 Asn Ser Phe Leu Leu Leu Glu Phe Ile Glu Asn Gly His Ala Tyr Pro
 85 90 95
 Glu Ser Tyr Arg Lys Leu Gly Lys Ile Val Ala Asn Met His Lys Asn
 100 105 110
 Ile Asn Ser Leu Asn Leu Phe Gly Phe Ser His Asn Phe Asn Gly Gly
 115 120 125
 Thr Ile Glu Phe Thr Asn Lys Trp Thr Ser Ser Trp Gly Asp Leu Phe
 130 135 140
 Ile Lys Ser Arg Met Asp Lys Leu Cys Ser Glu Ile Tyr Lys Lys Arg
 145 150 155 160
 Leu Phe Ser Ile Ser Asp Leu Leu Leu Tyr Glu Asp Ile Arg Lys Ile
 165 170 175
 Met Leu Lys Ser Leu Tyr Tyr His Gln Ser Ser Pro Ser Leu Arg Phe
 180 185 190
 Cys Cys Lys Val Glu Phe Ile Val
 195 200

<210> 7491
 <211> 159
 <212> PRT
 <213> S.epidermidis

<400> 7491
 Lys Glu Asp Lys Lys Val Lys Lys Gly Ile Phe Ile Leu Thr Gly Ile
 1 5 10 15
 Ile Trp Leu Val Leu Ile Tyr Leu Ala Gln Ile Leu Ala Tyr Ala Leu
 20 25 30
 Asn Thr Leu Ser Asn Thr Ser Asn Lys Gln Lys Ile Phe Ser Asp Ile
 35 40 45
 Ser Gln Leu Phe Ile Pro Pro Ala Lys His Pro Ile Ser Thr Ile Ile
 50 55 60
 Gly Phe Val Ser Asp Lys Asn Thr Val Phe Phe Val Ile Gly Val Ile
 65 70 75 80

Sequence = 6363425

Ala Thr Ile Ile Cys Ile Tyr Ile Leu Ile Lys Gln Leu Phe Glu Ser
 85 90 95
 Lys Asp Gly Asn Glu Lys Asn Gln Asp Tyr Lys Ile Ala Lys His Gly
 100 105 110
 Ser His Gly Ser Ala Lys Phe Ala Glu Asp Ser Glu Leu Phe Ser Glu
 115 120 125
 Gly His Tyr Lys Lys Met Lys Glu Asn Asp Ile Thr Asn Tyr Val Tyr
 130 135 140
 Asn Ser Leu Asp Lys Ser Leu Ile Glu Glu Arg Ser Asp Lys Glu
 145 150 155

<210> 7492

<211> 431

<212> PRT

<213> S.epidermidis

<400> 7492

Ile Gly Gly Asn Leu Met Lys Ile Arg Asn Phe Asn Glu Gly Thr Leu
 1 5 10 15
 Val Gly Lys His Asn His Leu Glu Tyr Ile Ile Asn Val Asp Leu Cys
 20 25 30
 His Ile Ser Asp Ile Asp Glu Ile Arg Tyr Asp Leu Thr Glu Pro Asn
 35 40 45
 Glu Leu Phe Phe Glu Val Lys Asp Leu Gln Lys Glu Gly Asp Tyr Phe
 50 55 60
 His Ile Ile Tyr Asn Thr Asp Asn Glu Tyr Asn Ser Phe Leu Ser Ala
 65 70 75 80
 Lys Lys Glu Ser Lys Ala Leu Lys Leu Ser Leu Met Asp Tyr Val Leu
 85 90 95
 Lys Val Asp Pro Leu Lys Asp Asn Ile Thr Val Met His Pro Ala Asn
 100 105 110
 Leu Phe Phe Lys Asn Ile Glu Asp Ile Lys Ile Gly Phe Lys Gly His
 115 120 125
 Glu Tyr Leu Pro Lys Pro Lys Ile Asn Asn Leu Glu Gln Tyr Lys Leu
 130 135 140
 Leu Ile Met Ser Thr Leu Ser Gln Tyr Thr Phe Asp Lys Tyr Tyr Arg
 145 150 155 160
 Asn Lys Phe Glu Val Leu Ser Lys Glu Lys Asp Asp Phe Phe His Lys
 165 170 175
 Val Asn Asn Ala Glu Thr Phe Glu Lys Leu Lys Glu Ile Val Arg His
 180 185 190
 Glu Leu Asn Gln Val Gln Thr Asp Tyr Leu Leu Asn Glu Glu Lys Arg
 195 200 205
 Lys Arg Glu Thr Arg Lys Lys Tyr Ile Arg Asn Leu Ile Leu Gly Phe
 210 215 220
 Val Gly Ile Ala Ile Val Ile Ser Leu Ile Ser Phe Met Ile Ile Asn
 225 230 235 240
 Gly Lys Gln Gln Glu Leu Asp Ser Lys Ile Ala Gln Ala Asp Lys Gln
 245 250 255
 Glu Gln Arg Ser Lys Val Tyr Glu Asn Leu Tyr Asn Gly Asn Val Asp
 260 265 270
 Gln Ala Val Lys Gly Met Lys Arg Asp Asp Ser Phe Asn Lys Lys Asp
 275 280 285
 Ile Glu Lys Thr Leu Lys Lys Glu Lys Lys Tyr Glu Glu Leu Ile Glu
 290 295 300
 Leu Ser Ser Lys Asn Thr Pro Tyr Val Ile Glu Gln Leu Tyr Lys Glu

305 310 315 320
 Gly Lys Gln Asn Lys Ile Arg Glu Leu Ala Phe Asn Phe Glu Asn Asn
 325 330 335
 Asp Thr Leu Ser Leu Glu Lys Lys Ile Leu Asp Lys Asp Gly Thr Ala
 340 345 350
 Phe Ser Val Gly Ser Thr Gly Lys Tyr Glu Glu Gln Ser Lys Arg Leu
 355 360 365
 Ala Leu Ala Ser Ala Lys Glu Gly Tyr Val Glu Ser Ala Lys Asp Ile
 370 375 380
 Asn Lys Lys Leu Lys Asp Asn Glu Val Glu Glu Glu Ile Asn Lys Ala
 385 390 395 400
 Glu Ile Lys Gln Leu Lys Glu Glu Lys Asp Ser Thr Lys Asp Lys Asp
 405 410 415
 Lys Lys Lys Glu Ile Gln Lys Asp Ile Glu Glu Leu Glu Lys Lys
 420 425 430

<210> 7493
 <211> 77
 <212> PRT
 <213> S.epidermidis

<400> 7493
 Ile Val Ala Asn Gly Tyr Ser Asp Asp Val Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Ile Ala Tyr Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Ile Asn Phe Ala Thr Glu Pro Asp His Leu Ser Glu Ala Thr Tyr
 35 40 45
 His Arg Ile Phe Val Asp Asp Ile Ile Tyr Lys Ser Ser Ile Ser Gln
 50 55 60
 Ala Ser Ile Pro Thr Gln Arg Gly Gly Ala Asn Leu Cys
 65 70 75

<210> 7494
 <211> 53
 <212> PRT
 <213> S.epidermidis

<400> 7494
 Ile Val Ala Asn Arg Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Val Lys Gln Cys Tyr Ala Lys Leu
 35 40 45
 Gln Cys Phe Tyr Pro
 50

<210> 7495
 <211> 44
 <212> PRT
 <213> S.epidermidis

<400> 7495
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Phe Val Lys Leu Phe Ile
 1 5 10 15

Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Asn Tyr Phe Ser
 35 40

<210> 7496
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7496
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Leu Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro
 35 40

<210> 7497
 <211> 57
 <212> PRT
 <213> S.epidermidis

<400> 7497
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Phe Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro Glu Glu Ile Cys Gly Ser Phe Tyr
 35 40 45
 Ile Glu Arg Lys Tyr Ile Gln Cys Leu
 50 55

<210> 7498
 <211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7498
 Ile Val Ala Asn Gly Tyr Ser Asp Asn Ile Phe Val Lys Leu Phe Ile
 1 5 10 15
 Ser Glu Ile Val His Thr Glu Asp Ser Phe Leu Leu Lys Leu Tyr Tyr
 20 25 30
 Lys Phe Asn Phe Ala Thr Glu Pro
 35 40

<210> 7499
 <211> 249
 <212> PRT
 <213> S.epidermidis

<400> 7499
 Asn Asn His Asn Asp Leu Ala Glu Gly Arg Lys Phe Thr Ser Ile Lys
 1 5 10 15
 Val Lys Lys Asp Trp Val Met Met Met Phe Lys Lys Lys Asn Lys Gln
 20 25 30

Asn Lys Asn Asn Glu Gln Gln Phe Glu Ile Ile Asn Arg Tyr Ile Lys
 35 40 45
 Gly Asp Gly Arg Asn Gln Ser Ile Gln Glu Asp Ser Leu Ile Ala Gly
 50 55 60
 Phe Tyr Lys Asp Tyr Val Val Thr Lys Asp Gly Tyr Ile Ser Gly Gly
 65 70 75 80
 Leu Asn Ile Thr Gly Val Asn Thr Glu Leu Leu Thr Lys Phe Glu Gln
 85 90 95
 Asn Asp Leu Leu Glu Glu Tyr Ser Ser Phe Ile Ser Asn Ile Leu Tyr
 100 105 110
 Asp Glu Pro Met Ile Lys Thr Ile Thr Glu Pro Val Asn Ile Gln Asn
 115 120 125
 Tyr Ile Lys His Leu Tyr Arg Gln Val Leu Leu Asp Met Lys Asn Asn
 130 135 140
 Asn Asn Lys Pro Thr Arg Arg Gly Gln Leu Ile Ala Gly Arg Ile Leu
 145 150 155 160
 Phe Leu Gln Glu Lys Leu Ala Lys Gly Glu Met Ser Thr Lys Lys His
 165 170 175
 Tyr Ile Phe Phe Ser Glu Lys Ile Thr Glu Asn Thr Val Ala Gln Leu
 180 185 190
 Asp His Ala Val Asn Arg Leu His Glu Lys Ile Asn Leu Asn Lys Glu
 195 200 205
 Ala Leu Gln Gln Ala Phe Ser His Tyr Gly Leu Glu Thr Arg Pro Ile
 210 215 220
 Tyr Gln Thr Glu Tyr Leu Asn Gln Phe Tyr Ala Leu Tyr Asp Tyr Lys
 225 230 235 240
 Gly Tyr Asn Asp Tyr His Leu Ser Asn
 245

<210> 7500

<211> 48

<212> PRT

<213> S.epidermidis

<400> 7500

Asn Asn Ser Asn Thr Asn Asp Ile Lys Phe Ile Gly Val Phe Tyr Cys
 1 5 10 15
 Thr Leu Thr Ile Leu Leu Lys Gly Ile Phe Ser Leu Leu Phe Glu Leu
 20 25 30
 Glu Leu Val Ile Ile Ile Asn Pro Leu Asn Ser Ser Ile Leu Leu Met
 35 40 45

<210> 7501

<211> 56

<212> PRT

<213> S.epidermidis

<400> 7501

Val Phe Gln Asn Ala Asp Ile Ser Phe Trp Val Phe Lys Tyr Phe Phe
 1 5 10 15
 Val Lys Thr Phe Gln Pro Pro Arg Val Ser Leu Ile Ser Leu Phe Leu
 20 25 30
 Leu Leu Val Leu Val Asn Phe His Glu Ile His Phe Leu Ser Cys Leu
 35 40 45
 His Arg Lys Ile Tyr Trp Ile Lys
 50 55

<210> 7502
 <211> 162
 <212> PRT
 <213> S.epidermidis

<400> 7502

```

Lys Met Lys Lys Leu Leu Thr Ile Val Ile Leu Phe Thr Leu Val Leu
1      5      10      15
Ala Gly Cys Gly Gln Asn Gln Ser Glu Lys Asn Ser Glu Lys His Asn
20      25      30
Glu Glu Lys Thr Val Asp Thr Thr Glu Glu Arg Asn Asp Met Ile Lys
35      40      45
Gly Leu Ile Glu Tyr Gly Tyr Glu Asn Asp Asp Tyr Lys Gly Tyr Lys
50      55      60
His Met Lys Asp Ile Leu Ser Glu Lys Leu Gln Lys Gln Ala Glu Leu
65      70      75      80
Gln Asn Gln Ser Ala Gln Thr Lys Gly Val Lys Lys Glu Thr Lys Asp
85      90      95
Ile Lys Leu Tyr Gln Asp Val Asp Asn Asp Asp Glu Leu Ile Tyr Ser
100     105     110
Ile Lys Leu Ser Ile Thr Asn Lys Lys Glu Lys Asn Ser Asp Tyr Ser
115     120     125
Met Arg Tyr Gly Lys Ile Glu Leu Thr Glu Glu Glu Gly Lys Gln Lys
130     135     140
Ile Asp Asn Val Glu Glu Leu Thr Gln Arg Asn Leu Val ,Ser Met Asn
145     150     155     160
Gln Glu

```

<210> 7503
 <211> 140
 <212> PRT
 <213> S.epidermidis

<400> 7503

```

Lys Gly Val Asn Tyr Met Ser Val Glu Gln Glu Val Lys Asp Ile Met
1      5      10      15
Leu Asp Met Leu Gly Glu Glu Lys Lys Val Lys Glu Asn Ile Ile Pro
20      25      30
Arg Asn Val Asp Ala Ser Tyr Lys Ile Phe Leu Asn Leu Asn Gly Lys
35      40      45
Glu Leu Ala Ile Val Phe Val Pro Phe Leu Leu Phe Leu Thr Ile Ala
50      55      60
Phe Gly Val Thr Phe Leu Met Gly Leu Leu Asn Leu Ile Thr Gly Phe
65      70      75      80
Met Val Phe Ile Val Gly Leu Ile Phe Gly Leu Thr Ile Tyr Gly Leu
85      90      95
Leu Thr Ile Arg Pro Ile Ser Thr Lys Glu Asn Ile Arg Met Ile Asp
100     105     110
Thr Ile Lys Gln Ser Gln Arg Phe Ser Arg Arg Gln Lys Val Tyr Phe
115     120     125
Tyr Lys Ser Lys Glu Gly Leu Gly Asp Asp Asp Val
130     135     140

```

<210> 7504

<211> 74
 <212> PRT
 <213> S.epidermidis

<400> 7504

```

Asn Tyr Thr Lys Ala Gln Lys Gly Gly Tyr Ile Thr Met Asn Asn Asn
1          5          10          15
Glu Glu Asn Ser Val Phe Phe Gly Lys Lys Lys Lys Val Ser Leu His
          20          25          30
Leu Leu Val Asp Pro Asp Met Lys Asp Glu Ile Ile Lys Tyr Ala Gln
          35          40          45
Glu Lys Val Asp Phe Asp Asn Val Ser Gln Ala Gly Arg Glu Ile Leu Lys
          50          55          60
Lys Gly Leu Glu Gln Ile Lys Ser Asn Lys
65          70

```

<210> 7505
 <211> 45
 <212> PRT
 <213> S.epidermidis

<400> 7505

```

Ala Gln Gln Lys Ile Val Ala Thr Ile Asn Leu Ser Leu Met Met Thr
1          5          10          15
Tyr His Phe Lys Thr Ile Lys Gly Arg Val Lys Thr Arg Ser Phe Leu
          20          25          30
Lys Asn Arg Ser Asp Leu Asp Glu Ser Asn Lys Tyr Asn
          35          40          45

```

<210> 7506
 <211> 87
 <212> PRT
 <213> S.epidermidis

<400> 7506

```

Ile Met Asn Glu Tyr Arg Ile Gln Lys Leu Tyr Arg Tyr Ile Cys Leu
1          5          10          15
Glu Phe Lys Asn Gln Arg Gln Leu Ile Gly Lys Arg Gln Glu Glu Val
          20          25          30
Ala Phe Asp Leu Ser Val Thr Ala Gly His Leu Ser Arg Ile Glu Asn
          35          40          45
Gly Lys Lys Pro Arg Ile Ala Leu His Thr Phe Leu Val Met Ser Glu
          50          55          60
Tyr Tyr Gly Val Asp Phe His Lys Val Val Lys Asn Ala Glu Glu Lys
          65          70          75          80
Met Glu Leu Asp Glu Gly Ile
          85

```

<210> 7507
 <211> 111
 <212> PRT
 <213> S.epidermidis

<400> 7507

```

Ile Ile Met Asp Lys Lys Glu Thr Lys His Leu Leu Lys Ile Lys Lys
1          5          10          15

```

Glu Asp Tyr Pro Gln Ile Phe Asp Phe Leu Glu Asn Val Pro Arg Gly
 20 25 30
 Thr Lys Thr Ala His Ile Arg Glu Ala Leu Arg Arg Tyr Ile Glu Glu
 35 40 45
 Ile Gly Glu Asn Pro Pro Ile Pro Ser Lys Glu His Thr Ala Pro Leu
 50 55 60
 Lys Glu His Thr Glu Pro Ile Lys Arg Asn Lys Glu Ser Phe Lys Asp
 65 70 75 80
 Ala Met Glu Arg Lys Asp Gln Leu Lys Gln Ala Glu Met Pro Lys Ile
 85 90 95
 Glu Glu Lys Asp Glu Glu Met Val Asp Ile Ser Ile Asp Asp Leu
 100 105 110

<210> 7508

<211> 261

<212> PRT

<213> S.epidermidis

<400> 7508

Ile Thr Met Glu Val Val Arg Leu Asn Gln Asn Leu Phe Asn Lys Leu
 1 5 10 15
 Arg Gly Asn Glu Ile Ser Ser Asn Lys Asn Gly Ser Arg Pro Tyr Tyr
 20 25 30
 Tyr Ser Phe Lys Arg Asn Asn Asn Arg Val Cys Ile Pro Phe Arg Thr
 35 40 45
 Asn Ala Gln Lys Val Pro Asn Lys Tyr Lys Ile Asn Leu Gly Gly Glu
 50 55 60
 Gln Pro Asp Lys Pro Asn Ser Ala Ile Asp Leu Thr Lys Ser Ile Val
 65 70 75 80
 Ile Ser Asn Asp Glu Tyr Leu Asn Asn Arg Ser Lys Ala Lys Ile Pro
 85 90 95
 Gln Asn Val Asn Asn Phe Leu Lys Gln Gln Ala Pro Ala Ile Glu Gln
 100 105 110
 Lys Tyr Asp Thr Met Ser Asn Asp Tyr Ile Lys Ala Lys Ala Ser Leu
 115 120 125
 Ser Lys Ile Pro Leu Val Lys Tyr Ser Thr Met Gln Tyr Phe His Lys
 130 135 140
 Glu Leu Asn Ile Gln Asp Ser Ile Asp Asn Gln Gln Thr Lys Asn Ala
 145 150 155 160
 Ile Asn Glu Leu Ile Ser Asn Gly Lys Ser Asn Lys Tyr Asn Lys Leu
 165 170 175
 Gln Ser Ser Leu Pro Asn Glu Lys Leu Asn Leu Leu Asp Asp Tyr Glu
 180 185 190
 Thr Leu Tyr Glu Phe Lys Ser Leu Thr Asp Tyr Pro Ala Lys Ile Asn
 195 200 205
 Ser Asn Asp Ile Asp Asn Pro Phe Leu Glu Val Glu Lys Asn Asn Lys
 210 215 220
 His Phe Thr Leu Ser Ala Leu Thr Ile Lys Asn Glu Pro Glu Lys His
 225 230 235 240
 Val Lys Asp Phe Leu Asn Tyr Asp Ile Glu Asn Glu Lys Asn Lys Asp
 245 250 255
 Ile Asp Leu Asp Leu
 260

<210> 7509

<211> 42

<212> PRT

<213> S.epidermidis

<400> 7509

Asn	Arg	Arg	Cys	Gly	Ala	Asp	Ile	Lys	Ile	Asn	Thr	Ala	Arg	Lys	Glu
1				5					10					15	
Thr	Thr	Ile	Glu	Ile	Lys	Thr	His	Tyr	Ile	Val	Leu	Arg	Arg	Arg	Ile
		20						25					30		
Leu	Arg	Leu	Phe	Phe	Ile	Lys	Phe	Met	Glu						
		35					40								

<210> 7510

<211> 143

<212> PRT

<213> S.epidermidis

<400> 7510

Leu	Glu	Lys	Cys	Tyr	Leu	Asn	Lys	Glu	Arg	Lys	Ile	Phe	Met	Ile	Asn
1				5					10					15	
Lys	Val	Ile	Tyr	Ser	Gly	Arg	Ile	Ala	Thr	Asp	Leu	Lys	Leu	Arg	Lys
		20						25					30		
Ser	Lys	Asn	Glu	Lys	Ser	Tyr	Val	Phe	Phe	Asn	Ile	Ala	Val	Pro	Arg
		35					40					45			
Gln	Phe	Asp	Asn	Asp	Arg	Thr	Asp	Phe	Ile	Asn	Cys	Val	Val	Trp	Gly
	50					55					60				
Lys	Gln	Ala	Glu	Ser	Leu	Val	Asp	Tyr	Gln	Ser	Lys	Gly	Asn	Leu	Ile
65					70					75				80	
Ile	Ile	Glu	Gly	Ser	Thr	Glu	Thr	Tyr	Lys	Lys	Asp	Asn	Ile	Asn	Met
				85					90					95	
Ser	Arg	Cys	Leu	Val	Glu	Lys	Thr	Ile	Phe	Leu	Glu	Ser	Lys	Lys	Glu
			100					105					110		
Asn	Lys	Lys	His	Asp	Val	Ser	Glu	Asp	Asp	Ala	Ile	Ser	Pro	Ala	Glu
		115					120					125			
Asp	Ser	Gly	Asn	Asp	Lys	Ser	Ile	Ser	Asp	Asp	Asp	Leu	Pro	Phe	
	130					135					140				

<210> 7511

<211> 360

<212> PRT

<213> S.epidermidis

<400> 7511

Ser	Ile	Met	Trp	Ser	Ala	Ile	Ala	Lys	Gly	Ile	Thr	Met	Leu	Met	Lys
1				5					10					15	
Lys	Lys	Ala	Leu	Ser	Lys	Ile	Leu	Lys	Pro	Val	Ile	Ala	Ile	Val	Ile
		20						25					30		
Gly	Phe	Phe	Leu	Leu	Ile	Phe	Ile	Met	Ile	Ala	Tyr	Leu	Val	Gly	Ser
		35					40					45			
Phe	Thr	Lys	Glu	Ile	Asn	Glu	Ser	Gly	Glu	Gln	Lys	Met	Lys	Glu	Ala
	50					55					60				
Glu	Ser	Thr	Ala	Thr	Gly	Ala	Cys	Thr	Gly	Gly	Ser	Val	Asp	Gly	Ser
65					70					75				80	
Gly	Ile	Ser	Ala	Phe	Glu	Lys	Asn	Ala	Lys	Gly	Gly	Ala	Leu	Glu	Gly
				85					90					95	
Lys	Gly	Lys	Asp	Met	Val	Lys	Ile	Ala	Lys	Lys	Asn	Lys	Ile	Pro	Pro
			100					105					110		

Lys Leu Phe Ile Ala Ile Val Ala Ser Glu Ser Glu Trp Gly Arg Gly
 115 120 125
 Ala Asn Ala Thr Lys Gln Lys Asn Pro Leu Ser Ile Met Gly Ala Gly
 130 135 140
 Pro Leu Gln Val Tyr Pro Ser Ile Glu Glu Gly Leu Asp Lys Gly Ala
 145 150 155 160
 Lys Asn Leu Tyr Asp Leu Tyr Ile Ser Glu Gly Leu Thr Thr Pro Glu
 165 170 175
 Lys Ile Gly Pro Lys Tyr Ala Pro Val Gly Ala Ser Asn Asp Pro Asp
 180 185 190
 Asp Leu Asn Ser Asn Trp Val Pro Thr Val Lys Lys Ile Met Lys Ser
 195 200 205
 Phe Gly Gly Lys Glu Ala Lys Cys Ser Thr Glu Ser Ser Gly Gly Gly
 210 215 220
 Ser Asp Gly Lys Gly Phe Asp Phe Lys Gly Glu Phe Pro Lys Pro Asp
 225 230 235 240
 Lys Ser Lys Tyr Asn Gly Gln Ser Tyr Pro Trp Gly Gln Cys Thr Trp
 245 250 255
 Tyr Val His Gln Arg Arg Lys Glu Ile Gly Lys Pro Val Pro Leu Thr
 260 265 270
 Trp Gly Asn Gly Gly Asp Trp Gly Asp Asn Ala Lys Ala Gln Gly Trp
 275 280 285
 Glu Val Gly Ser Lys Pro Lys Ala Gly Ala Gly Ala Ser Val Lys Pro
 290 295 300
 Gly Asn Phe Gly Ala Pro Pro Pro Tyr Gly His Ile Met Phe Val Glu
 305 310 315 320
 Lys Val Lys Lys Asp Gly Gly Ile Val Val Ser Glu Ala Asn Val Lys
 325 330 335
 Gly Leu Gly Val Ile Ser Ser Arg Glu Phe Ser Lys Ala Glu Thr Gln
 340 345 350
 Arg Met Gln Phe Ile Tyr Asp Lys
 355 360

<210> 7512

<211> 370

<212> PRT

<213> S.epidermidis

<400> 7512

Leu Cys Asn Arg Thr Arg Tyr Ile Lys Leu Ile Phe Glu Phe Leu Lys
 1 5 10 15
 Lys Glu Arg Asn Ala Asn Ala Val Ile Leu Asp Pro His Lys Asn Asn
 20 25 30
 Pro Arg Ala Ile Arg Ala Tyr Gln Lys Ser Gly Phe Arg Ile Ile Glu
 35 40 45
 Asp Leu Pro Glu His Glu Leu His Glu Gly Lys Lys Glu Asp Cys Tyr
 50 55 60
 Leu Met Glu Tyr Arg Tyr Asp Asp Asn Ala Thr Asn Val Lys Ala Met
 65 70 75 80
 Lys Tyr Leu Ile Glu His Tyr Phe Asp Asn Phe Lys Val Asp Ser Ile
 85 90 95
 Glu Ile Ile Gly Ser Gly Tyr Asp Ser Val Ala Tyr Leu Val Asn Asn
 100 105 110
 Glu Tyr Ile Phe Lys Thr Lys Phe Ser Thr Asn Lys Lys Lys Gly Tyr
 115 120 125
 Ala Lys Glu Lys Ala Ile Tyr Asn Phe Leu Asn Thr Asn Leu Glu Thr

130 135 140
 Asn Val Lys Ile Pro Asn Ile Glu Tyr Ser Tyr Ile Ser Asp Glu Leu
 145 150 155 160
 Ser Ile Leu Gly Tyr Lys Glu Ile Lys Gly Thr Phe Leu Thr Pro Glu
 165 170 175
 Ile Tyr Ser Thr Met Ser Glu Glu Glu Gln Asn Leu Leu Lys Arg Asp
 180 185 190
 Ile Ala Ser Phe Leu Arg Gln Met His Gly Leu Asp Tyr Thr Asp Ile
 195 200 205
 Ser Glu Cys Thr Ile Asp Asn Lys Gln Asn Val Leu Glu Glu Tyr Ile
 210 215 220
 Leu Leu Arg Glu Thr Ile Tyr Asn Asp Leu Thr Asp Ile Glu Lys Asp
 225 230 235 240
 Tyr Ile Glu Ser Phe Met Glu Arg Leu Asn Ala Thr Thr Val Phe Glu
 245 250 255
 Gly Lys Lys Cys Leu Cys His Asn Asp Phe Ser Cys Asn His Leu Leu
 260 265 270
 Leu Asp Gly Asn Asn Arg Leu Thr Gly Ile Ile Asp Phe Gly Asp Ser
 275 280 285
 Gly Ile Ile Asp Glu Tyr Cys Asp Phe Ile Tyr Leu Leu Glu Asp Ser
 290 295 300
 Glu Glu Glu Ile Gly Thr Asn Phe Gly Glu Asp Ile Leu Arg Met Tyr
 305 310 315 320
 Gly Asn Ile Asp Ile Glu Lys Ala Lys Glu Tyr Gln Asp Ile Val Glu
 325 330 335
 Glu Tyr Tyr Pro Ile Glu Thr Ile Val Tyr Gly Ile Lys Asn Ile Lys
 340 345 350
 Gln Glu Phe Ile Glu Asn Gly Arg Lys Glu Ile Tyr Lys Arg Thr Tyr
 355 360 365
 Lys Asp
 370

<210> 7513

<211> 129

<212> PRT

<213> S.epidermidis

<400> 7513

Leu Cys Asn Arg Thr Pro Lys Lys Asn Ser Lys Ser Phe Arg Glu Ala
 1 5 10 15
 Val Lys Gly Ile Phe Lys Phe Thr Asp Ile Asn Leu Ala Arg Glu Ala
 20 25 30
 Lys Asn Arg Leu Ile His Asp Tyr Ile Asp Gln Pro Lys Tyr Ser Lys
 35 40 45
 Ala Cys Ala Ser Leu Asp Asp Gly Phe Glu Asp Ala Phe Gln Tyr Thr
 50 55 60
 Val Gln Gly Asn Ser His Asn Arg Leu Lys Ser Thr Asn Leu Ile Glu
 65 70 75 80
 Arg Leu Asn Gln Glu Val Arg Arg Arg Glu Lys Ile Ile Arg Ile Phe
 85 90 95
 Pro Asn Gln Thr Ser Ala Asn Arg Leu Ile Gly Ala Val Leu Met Asp
 100 105 110
 Leu His Asp Glu Trp Ile Tyr Ser Ser Arg Lys Tyr Ile Asn Phe Asp
 115 120 125
 Lys

```
<210> 7514
<211> 678
<212> PRT
<213> S.epidermidis
```

<400>	7514														
Leu 1	Glu	Arg	Arg	Glu 5	Phe	Met	Ile	Met	Ala 10	Phe	Leu	Lys	Lys	Lys 15	Ser
Gln	Glu	Gln	Val 20	Thr	Asn	Lys	Ile	His 25	Asn	Glu	Ser	Phe	Gln 30	Lys	Leu
Thr	Glu	Val 35	Leu	Asp	Thr	Asp 40	Ser	Val	Asp	Ser	Ile	Tyr 45	Pro	Phe	Ser
Trp	Ile 50	Glu	Lys	Lys	Ser	His 55	Ile	Glu	Thr	Gly 60	Glu	Asn	Tyr	Ile	Lys
Asn 65	Leu	Leu	Val	Val	Asp 70	Tyr	Pro	Gln	Ser	Val 75	Lys	Gly	Ala	Tyr	Leu 80
Ser	Asn	Leu	Leu	Lys 85	Lys	Asn	Gly	Asn	Ile 90	Gln	Ile	Thr	Lys	Phe 95	Ile
Arg	Pro	Ala 100	Asn	Ile	Glu	Arg	Met	Ile 105	Asp	His	Leu	Asn	Asn 110	Ser	Ile
Lys	Asn	Lys 115	Thr	Ala	Glu	Gln	Met 120	Arg	Thr	Thr	Asp	Pro 125	Lys	Arg	Asn
Ala	Thr 130	Ile	Lys	Arg	Glu	Ile 135	Glu	Ser	Ser	Lys	Lys 140	Gln	Leu	Asp	Lys
Phe 145	Leu	Asp	Glu	Lys	Thr 150	Gly	Phe	Met	Tyr	Met 155	Tyr	Met	Tyr	Ile	Thr 160
Leu	Asn	Gly	Asp 165	Ser	Tyr	Glu	Lys	Ile	Gln 170	Ala	Leu	Glu	Lys	Asp 175	Val
Lys	Arg	Thr 180	Leu	Thr	Arg	Leu	Arg 185	Leu	Lys	Thr	His	Thr	Pro 190	Thr	Asn
Ala	Met 195	Arg	Glu	Ser	Phe	His	Thr 200	Val	Leu	Pro	Leu	Asn	Arg 205	Asn	Phe
Leu	Ser 210	Ala	Phe	Thr	Gln	Gln 215	Asn	Met	Asp	Thr	Ala 220	Thr	Ala	Gly	His
Phe 225	Phe	Met	Phe	Asp	Asp 230	Ser	Glu	Ile	Ile	Asp 235	Leu	Thr	Pro	Asn	Thr 240
Ser	Val	Phe	Gly 245	Ile	Asn	Lys	Asn	Thr	Asp 250	Ser	Leu	Val	Ala	Val 255	Asp
Phe	Asn	Asn	Lys 260	Glu	Lys	Thr	Leu	Asn 265	Lys	Asn	Met	Thr	Ile 270	Ile	Gly
Thr	Ser	Gly 275	Val	Gly	Lys	Ser	Thr 280	Leu	Asn	Met	Arg	Met 285	Ile	Leu	Asp
Asn	Ile 290	Lys	Lys	Ser	Ile	Arg 295	Gln	Phe	Ile	Ile	Asp 300	Pro	Glu	Asp	Glu
Phe 305	Ser	Tyr	Ile	Thr	Lys 310	Tyr	Tyr	Gly	Gly	Thr 315	Val	Val	Asn	Ile	Ser 320
Thr	Ser	Ser	Asn 325	Ile	Lys	Ile	Asn	Pro	Phe	Glu	Ile	Phe	Ser	Glu 335	Glu
Val	Phe	Glu	Lys 340	Glu	Asp	Glu	Thr	Asp 345	Asn	Glu	Thr	Thr	Ser	Asp	Val
Leu	Thr	Glu	Asn 355	Asn	Glu	His	Glu	Ser 360	Gln	Ile	Asp	Thr	Leu	Val	Arg
Ser	Lys 370	Ile	Gly	Lys	Leu	Lys 375	Thr	Phe	Phe	Arg	Val 380	Leu	Lys	Asp	Glu
Ile	Ser	Gln	Thr	Glu	Ile	Ser	Val	Leu	Ser	Ser	Thr	Leu	Arg	Gln	Leu

<400> 7517

Ile	Ile	Cys	Gly	Gly	Phe	Ile	Met	Ser	Asn	Val	Tyr	Val	Met	Ala	Leu
1				5					10					15	
Asp	Phe	Gly	Asn	Gly	Phe	Val	Lys	Gly	Lys	Ile	Asn	Asp	Glu	Gln	Phe
		20						25					30		
Val	Ile	Pro	Cys	Gln	Lys	Tyr	Ser	His	Ala	Gly	Lys				
		35					40								

<210> 7518

<211> 257

<212> PRT

<213> S.epidermidis

<400> 7518

Lys	Tyr	Thr	Gly	Met	Glu	Arg	Ala	Ile	Met	Asn	Arg	Leu	Asn	Thr	Asn
1				5					10					15	
Tyr	Phe	Asp	Asn	Phe	Tyr	Ile	Asp	Trp	Gln	Asn	Asn	Glu	Ile	Ser	Glu
		20					25					30			
Asn	Tyr	Val	Glu	Phe	Cys	Gln	Lys	Gln	Ile	Asn	Asn	Leu	Ser	His	Ile
		35					40					45			
Val	Pro	Ser	Leu	Lys	Lys	Glu	Lys	Arg	Lys	Ile	Ile	Asp	Thr	Cys	Cys
	50					55					60				
Gly	Cys	Gly	Phe	His	Ser	Lys	Phe	Leu	Ile	Asp	Lys	Gly	His	His	Val
65				70					75					80	
Ile	Ser	Phe	Asp	Lys	Ser	Glu	Glu	Met	Leu	Asn	Phe	Ala	Tyr	Lys	Lys
			85					90						95	
Asn	Gly	Ile	Leu	Gly	Lys	Arg	Gln	Ser	Leu	Asp	Glu	Glu	Phe	Pro	Glu
			100					105					110		
Asn	His	Val	Asp	Leu	Ile	Leu	Asn	Leu	Asn	Thr	Ser	Ile	Gly	Tyr	Lys
		115					120					125			
Lys	Asn	Asp	Leu	Lys	Asn	Leu	Leu	Arg	Asn	Ser	Tyr	Thr	Ser	Leu	Lys
	130					135					140				
Lys	Gly	Gly	Ile	Leu	Ile	Ile	Asp	Leu	Met	Asn	Pro	Ala	Phe	Phe	Tyr
145				150					155					160	
Lys	Asn	Phe	Glu	Glu	Gln	Met	Ile	Phe	Asn	Phe	Lys	Asp	Tyr	Glu	Val
			165					170						175	
Asn	Gln	Thr	Ile	Lys	Ile	Asn	Lys	Ile	Tyr	Asn	Ser	Ile	Val	Ser	Thr
		180					185						190		
Trp	Asp	Val	Tyr	Lys	Asn	Asn	Glu	Tyr	Ser	Lys	Asp	Leu	Ser	Arg	Glu
	195						200					205			
Leu	Lys	Phe	Lys	Leu	Tyr	Thr	Thr	Asn	Asp	Ile	Ile	Cys	Ser	Ser	Leu
	210					215					220				
Tyr	Tyr	Asn	Phe	Thr	Leu	Ser	Asn	Ile	Ser	Phe	Tyr	Gly	Asp	Met	Lys
225					230					235				240	
Gly	Asn	Glu	Phe	His	Glu	Asn	Ser	Pro	Arg	Leu	Ile	Val	Lys	Ile	Thr
			245						250					255	

Lys

<210> 7519

<211> 209

<212> PRT

<213> S.epidermidis

<400> 7519

Tyr Arg Arg Gly Phe Leu Gly Asn Leu Asp Phe Asp His Glu Gly Tyr
 1 5 10 15
 Arg Lys Leu Leu Pro Leu Lys Asp Phe Lys His Phe Ile Lys His Ser
 20 25 30
 Asp Ser Lys Thr Arg Asn His Phe Ile Gly Met Ala Phe Asn Asn Lys
 35 40 45
 Thr Asp Val Phe Ser Arg Asn Phe Ser Asn Lys Met Ile Asn Ile Phe
 50 55 60
 Pro Lys Asn Glu Phe Tyr Ile His Ile Gln Gln Phe Pro Glu Asn Asp
 65 70 75 80
 Ser Pro Ser Tyr Met Val Tyr Asn Thr Asp Ile Thr Ala Phe Ile Gln
 85 90 95
 Phe Arg Leu Val Gly Arg Ser Glu Asn Lys Tyr Leu Glu Asn Ile Ile
 100 105 110
 Arg Asp Tyr Gly Val Leu Ile Glu Val Glu Ala Leu His Ser Phe Lys
 115 120 125
 Lys Gly Met Gly Ala Met Leu Val Ser Gln Leu Glu Lys Leu Ser Asp
 130 135 140
 Lys Leu Phe Ile Pro Ile Tyr Leu Tyr Asp Thr Asn Leu Lys Asp Glu
 145 150 155 160
 Leu Tyr Tyr Gln Asp Leu Gly Phe Phe Asp Thr Thr Lys Lys Gly Asn
 165 170 175
 His Gly Glu Pro Leu Leu Val Tyr Lys Pro Lys Asn Leu Glu Thr Asn
 180 185 190
 Lys Lys Glu Lys Pro Ile Lys Ser Leu Phe Lys Lys Val Phe Asn Ile
 195 200 205
 Asn

<210> 7520

<211> 669

<212> PRT

<213> S.epidermidis

<400> 7520

Gly Asp Phe Ile Met Ala Met Tyr His Phe Gln Asn Lys Phe Val Ser
 1 5 10 15
 Lys Ala Asn Gly Gln Ser Ala Thr Ala Lys Ser Ala Tyr Asn Ser Ala
 20 25 30
 Ser Arg Ile Lys Asp Phe Lys Glu Asn Glu Phe Lys Asp Tyr Ser Asn
 35 40 45
 Lys Gln Cys Asp Tyr Ser Glu Ile Leu Leu Pro Asn Asn Ala Asp Asp
 50 55 60
 Lys Phe Lys Asp Arg Glu Tyr Leu Trp Asn Lys Val His Asp Val Glu
 65 70 75 80
 Asn Arg Lys Asn Ser Gln Val Ala Arg Glu Ile Ile Ile Gly Leu Pro
 85 90 95
 Asn Glu Phe Asp Pro Asn Ser Asn Ile Glu Leu Ala Lys Glu Phe Ala
 100 105 110
 Glu Ser Leu Ser Asn Glu Gly Met Ile Val Asp Leu Asn Ile His Lys
 115 120 125
 Ile Asn Glu Glu Asn Pro His Ala His Leu Leu Cys Thr Leu Arg Gly
 130 135 140
 Leu Asp Lys Asn Asn Glu Phe Glu Pro Lys Arg Lys Gly Asn Asp Tyr
 145 150 155 160
 Ile Arg Asp Trp Asn Thr Lys Glu Lys His Asn Glu Trp Arg Lys Arg

				165					170				175			
Trp	Glu	Asn	Val	Gln	Asn	Lys	His	Leu	Glu	Lys	Asn	Gly	Phe	Ser	Val	
			180					185					190			
Arg	Val	Ser	Ala	Asp	Ser	Tyr	Lys	Asn	Gln	Asn	Ile	Asp	Leu	Glu	Pro	
		195					200					205				
Thr	Lys	Lys	Glu	Gly	Trp	Lys	Ala	Arg	Lys	Phe	Glu	Asp	Glu	Thr	Gly	
	210					215					220					
Lys	Lys	Ser	Ser	Ile	Ser	Lys	His	Asn	Glu	Ser	Ile	Lys	Lys	Arg	Asn	
225					230					235					240	
Gln	Gln	Lys	Ile	Asp	Lys	Met	Phe	Asn	Glu	Val	Asp	Asp	Met	Lys	Ser	
			245						250					255		
His	Lys	Leu	Asn	Ala	Phe	Ser	Tyr	Met	Asn	Lys	Ser	Asp	Ser	Thr	Thr	
			260					265					270			
Leu	Lys	Asn	Met	Ala	Lys	Asp	Leu	Lys	Ile	Tyr	Val	Thr	Pro	Ile	Asn	
		275					280					285				
Met	Tyr	Lys	Glu	Asn	Glu	Arg	Leu	Tyr	Asp	Leu	Lys	Gln	Lys	Thr	Ser	
	290					295					300					
Leu	Ile	Thr	Asp	Asp	Glu	Asp	Arg	Leu	Asn	Lys	Ile	Glu	Asp	Ile	Glu	
305					310					315					320	
Asp	Arg	Gln	Lys	Lys	Leu	Glu	Ser	Ile	Asn	Glu	Val	Phe	Glu	Lys	Gln	
			325						330					335		
Ala	Gly	Ile	Phe	Phe	Asp	Lys	Asn	Tyr	Pro	Asp	Gln	Ser	Leu	Asn	Tyr	
			340					345					350			
Ser	Asp	Asp	Glu	Lys	Ile	Phe	Ile	Thr	Arg	Thr	Ile	Leu	Asn	Asp	Arg	
	355						360					365				
Asp	Val	Leu	Pro	Ala	Asn	Asn	Glu	Leu	Glu	Asp	Ile	Val	Lys	Glu	Lys	
	370					375					380					
Arg	Ile	Lys	Glu	Ala	Gln	Ile	Ser	Leu	Asn	Thr	Val	Leu	Gly	Asn	Arg	
385					390					395					400	
Asp	Ile	Ser	Leu	Glu	Ser	Ile	Glu	Lys	Glu	Ser	Asn	Phe	Phe	Ala	Asp	
			405						410					415		
Lys	Leu	Ser	Asn	Ile	Leu	Glu	Lys	Asn	Asn	Leu	Ser	Phe	Asp	Asp	Val	
			420					425					430			
Leu	Glu	Asn	Lys	His	Glu	Gly	Met	Glu	Asp	Ser	Leu	Lys	Ile	Asp	Tyr	
		435					440					445				
Tyr	Thr	Asn	Lys	Leu	Glu	Val	Phe	Arg	Asn	Ala	Glu	Asn	Ile	Leu	Glu	
	450					455					460					
Asp	Tyr	Tyr	Asp	Val	Gln	Ile	Lys	Glu	Leu	Phe	Thr	Asp	Asp	Glu	Asp	
465					470					475					480	
Tyr	Lys	Ala	Phe	Asn	Glu	Val	Thr	Asp	Ile	Lys	Glu	Lys	Gln	Gln	Leu	
			485						490					495		
Ile	Asp	Phe	Lys	Thr	Tyr	His	Gly	Thr	Glu	Asn	Thr	Ile	Glu	Met	Leu	
		500						505					510			
Glu	Thr	Gly	Asn	Phe	Ile	Pro	Lys	Tyr	Ser	Asp	Glu	Asp	Arg	Lys	Tyr	
		515					520					525				
Ile	Thr	Glu	Gln	Val	Lys	Leu	Gln	Glu	Lys	Glu	Phe	Lys	Pro	Asn		
	530					535					540					
Lys	Asn	Gln	His	Asp	Lys	Phe	Val	Phe	Gly	Ala	Ile	Gln	Lys	Lys	Leu	
545					550					555					560	
Leu	Ser	Glu	Tyr	Asp	Phe	Asp	Tyr	Ser	Asp	Asn	Asn	Asp	Leu	Lys	His	
			565						570					575		
Leu	Tyr	Gln	Glu	Ser	Asn	Glu	Val	Gly	Asp	Glu	Ile	Ser	Lys	Asp	Asn	
			580					585					590			
Ile	Glu	Glu	Phe	Tyr	Glu	Gly	Asn	Asp	Ile	Leu	Val	Asp	Lys	Glu	Thr	
		595				600						605				
Tyr	Asn	Asn	Tyr	Asn	Arg	Lys	Gln	Gln	Ala	Tyr	Gly	Leu	Ile	Asn	Ala	

```
<210> 7521
<211> 40
<212> PRT
<213> S.epidermidis
```

```
<210> 7522
<211> 41
<212> PRT
<213> S.epidermidis
```

```
<210> 7523
<211> 55
<212> PRT
<213> S.epidermidis
```

```
<210> 7524
<211> 324
<212> PRT
<213> S.epidermidis
```

<400> 7524
Leu Asp Asn Ile Thr Phe Arg Lys Arg Ile Glu Glu Tyr Arg Lys Arg

3443

```

1           5           10           15
Ser Ile Glu Gln Lys Lys Tyr Glu Ser Lys Leu Asn Tyr Gln Ser Arg
                20                25                30
Phe Gly Val Lys Asp Asp Glu Val Ser Thr Phe Asn Ile Lys Gly Ile
                35                40                45
Ala Thr Asp Lys Lys Glu Asn Lys Leu Val Met Ala Glu Asp Arg Glu
                50                55                60
Asp Lys Gln Lys Val Leu Leu Tyr Ala Asn Lys Asp Asn Asp Met Tyr
65                70                75                80
Tyr Leu Asn Ser Gly Ser Thr Tyr Lys Glu Ala Val Gln Asn Thr Phe
                85                90                95
Gly Asn Glu Thr Asn Tyr Glu Met Val Asp Asp Glu Leu Phe Ile Tyr
                100                105                110
Asn Ser Lys Asn Gln Ala Leu Thr Asn Tyr Asp Gln Leu Asp Glu Tyr
                115                120                125
His Asn Arg Gln Lys Gln Leu Gln Tyr Asn Thr Lys Leu Glu Gln Glu
                130                135                140
Arg Lys Gln Arg Leu Thr Asp Thr Asn Lys Val Ser Glu Asn Ala Lys
145                150                155                160
Glu Asp Leu Ala Leu Ser Leu Gly Leu Thr Ala Thr Ala Leu Lys Gly
                165                170                175
Asn Ile Asn Ile Ser Asn Val Glu Lys Val Thr Asp Asn Glu Ser Met
                180                185                190
Val Thr Ile Glu Asn Glu Ile Asn Gly Lys Ser Glu His Leu Ile Ser
                195                200                205
Asp Phe Lys Asp Ser Phe Ile Glu Lys Ala Lys Glu Lys Leu Thr Val
210                215                220
Ser Pro Ser Met Arg Leu Gly Phe Glu Glu Phe Lys Asn Ala Ser Gly
225                230                235                240
Gln Ile Ala Met Gly Phe Thr Glu Phe Phe Gly Ala Arg Tyr Asp Glu
                245                250                255
Ser Thr Leu Glu Asn Asp Pro Lys Val Val Ala Thr Glu Lys Gly Tyr
                260                265                270
Ser Val Ser Val Phe Asp Lys Asp Gly Asn Lys Lys Asp Leu Thr Ser
                275                280                285
Ala Asp Thr Phe Glu Glu Ala Val Lys Leu Ser Lys Glu Met Lys His
290                295                300
Asp Asn Ser Leu Ser Arg Ser Glu Ile Glu Leu Asn Gln Glu Leu Glu
305                310                315                320
Lys Lys Lys Ile

```

<210> 7525

<211> 46

<212> PRT

<213> S.epidermidis

<400> 7525

```

Lys Glu Gly Ile Tyr Ala Phe Phe Phe Tyr Thr Ile Leu Phe Ile Ser
1           5           10           15
Ala Tyr Leu Phe Tyr Phe Ser Thr His Gly Ala Val Tyr Cys Asp Ser
                20                25                30
Tyr Leu Cys Thr Asp Asp Leu Tyr Thr Ser Ala Tyr Val Leu
                35                40                45

```

<210> 7526

<211> 377

<212> PRT

<213> S.epidermidis

<400> 7526

```

Tyr Ser Ile Met Thr Thr Ile Val Leu Leu Lys Ser Tyr Leu Ile Lys
1      5      10      15
Lys Lys Leu Tyr Leu Lys Met Met Leu Lys Thr Leu Cys Tyr Leu Leu
20      25      30
Lys Val Lys Lys Ile Lys Asn Asn Thr Met Ser Lys Tyr Lys Lys Ile
35      40      45
Lys Ser Asn Ile Asp Lys Asn Lys Asp Asn Asn Thr Val Tyr Gly Ser
50      55      60
Ile Thr Asp Gln Tyr Gly Asn Asn Leu Ile Thr Ile Lys Lys Asn Gly
65      70      75      80
Lys Thr Phe Phe Phe Ile Asp Lys Leu Glu Phe Lys Pro Lys Leu Thr
85      90      95
Ser Val Tyr Val Lys Glu Phe Asn Asn Thr Gly Ile Tyr Lys Tyr Gln
100     105     110
Gln Glu Asn Ala Lys Lys Val Ile Ala Glu Ser Asn Gln Thr Thr Glu
115     120     125
Leu Gly Lys Phe Phe Ile Gly Lys Tyr Ser Ile Lys Thr Asp Lys Thr
130     135     140
Ile Glu Asp Ser Ile His Asn Gly Thr Leu Thr Gly Lys Ile Asp Ile
145     150     155     160
Asp Leu Ser Asn Arg Gly Asn Asn Asn Lys Ile Tyr Ala Asp Glu Asp
165     170     175
Phe Asn Gln Ser Trp Phe Lys Val Lys Leu Asn Asn Asp Ser Leu Leu
180     185     190
Glu Lys Asn Ser Tyr Lys Leu Leu Ile Asp Asp Lys Asp Val Asp Tyr
195     200     205
Asn Ser Lys Lys Thr Tyr Gly Lys Tyr Tyr Asn Pro Thr Glu Leu Ser
210     215     220
Val Tyr Ala Ile Gly Lys Leu Glu Gly Lys Glu Phe Lys Thr Asn Arg
225     230     235     240
Ile Asn Ile Arg Arg Asn Tyr Asp Asn Lys Pro Gln Asn Leu Lys Leu
245     250     255
Ser Phe Lys Glu Ser Gln Ile Arg Asp Tyr Glu Ser Lys Ser Lys Lys
260     265     270
Val Lys Glu Lys Ala Lys Ser Tyr Ile Lys Glu Tyr Thr Lys Glu Leu
275     280     285
Asn Lys Ala Tyr Lys Lys Lys Asp Tyr Lys Tyr Ile Ser Asp Tyr Val
290     295     300
Lys Asn Asn Ser Gln Leu Glu Lys Gln Leu Lys Lys Gln Val Lys Ser
305     310     315     320
Lys Ser Lys Val Lys Phe Lys Asp Val Lys Ile Asn Asn Val Lys Arg
325     330     335
Asp Lys Asn Lys Ile Tyr Ile Glu Leu Ser Lys Thr Asn Asn Gly Asn
340     345     350
Val Phe Gln Thr Lys Tyr Thr Leu Asp Tyr Asp Asn Val Ser Asn Glu
355     360     365
Phe Leu Val Glu Asp Ser His Asp Asn
370     375

```

<210> 7527

<211> 705

<212> PRT

<213> S.epidermidis

<400> 7527

Lys	Glu	Val	Ile	Leu	Met	Asn	Thr	Leu	Ile	Leu	Cys	Glu	Lys	Pro	Ser
1				5					10					15	
Gln	Ala	Met	Asp	Leu	Ser	Thr	Val	Phe	Ala	Lys	Lys	Lys	Lys	Gln	Asn
			20					25					30		
Gly	Tyr	Met	Glu	Ile	Ser	Asp	Glu	Gln	Leu	Asn	Val	Ser	Gly	Phe	Leu
		35					40					45			
Thr	Trp	Ala	Val	Gly	His	Leu	Val	Glu	Leu	Lys	Glu	Pro	Gln	Glu	Tyr
	50					55					60				
Asp	Glu	Lys	Tyr	Lys	Asn	Phe	Ser	Thr	Tyr	Pro	Ile	Leu	Leu	Glu	Lys
65					70					75				80	
Asp	Asp	Phe	Gln	Phe	Lys	Val	Ser	Asp	Lys	Thr	Lys	Asp	Gln	Phe	Asn
				85					90					95	
Asn	Ile	Lys	Lys	Ile	Phe	Lys	Glu	Asn	Lys	Ile	Asp	Glu	Val	Ile	Ile
			100					105					110		
Ala	Thr	Asp	Pro	Ala	Arg	Glu	Gly	Glu	Asn	Ile	Ala	Tyr	Lys	Ile	Leu
		115					120					125			
Asn	Gln	Leu	Lys	Val	Thr	Asp	Lys	Val	Thr	Ile	Lys	Arg	Leu	Trp	Leu
	130					135						140			
Thr	Ser	Lys	Val	Glu	Ser	Ser	Ile	Arg	Lys	Ala	Phe	Lys	Asn	Ile	Leu
145					150					155				160	
Pro	Lys	Glu	Lys	Thr	Tyr	Gly	Phe	Tyr	Lys	Glu	Gly	Arg	Ala	Arg	Glu
				165				170					175		
Leu	Ser	Asp	Trp	Leu	Val	Gly	Ile	Asn	Leu	Ser	Arg	His	Phe	Thr	Lys
		180						185				190			
Ile	Ser	Arg	Glu	Leu	Gly	Asn	Asp	Gly	Val	Ile	His	Ile	Gly	Arg	Val
	195					200						205			
Ser	Ser	Pro	Thr	Leu	Asn	Met	Val	Tyr	Asn	Arg	Glu	Asn	Asn	Ile	Lys
	210					215					220				
Gly	Phe	Lys	Gly	Lys	Lys	Phe	Tyr	Lys	Val	Ser	Ala	Thr	Ile	Asn	Lys
225					230					235				240	
Asp	Glu	Gln	Glu	Val	Lys	Thr	Glu	Leu	Lys	Asn	Lys	Phe	Asp	Ser	Glu
				245				250					255		
Asp	Glu	Leu	His	Glu	Phe	Leu	Phe	Glu	Asn	Asp	Ile	Thr	Asp	Leu	Thr
			260					265					270		
Gln	Lys	Gly	Leu	Val	Thr	Asp	Ile	Glu	Lys	Glu	Ile	Gly	Tyr	Thr	Met
	275					280						285			
Pro	Pro	Lys	Phe	Tyr	Asp	Leu	Ser	Ala	Leu	Gln	Glu	Asp	Met	Asn	Asp
	290				295						300				
Lys	Tyr	Lys	Ile	Ser	Ala	Lys	Arg	Thr	Leu	Glu	Ile	Ala	Gln	Thr	Leu
305				310						315				320	
Tyr	Glu	Lys	Lys	Leu	Ile	Thr	Tyr	Pro	Arg	Thr	Asp	Ser	Arg	Tyr	Ile
			325					330					335		
Thr	Glu	Asp	Glu	Lys	Glu	Met	Leu	Leu	Glu	Asn	Ile	Asp	Tyr	Leu	Lys
			340					345					350		
Glu	Ile	Thr	Lys	Ile	Asn	Leu	Asn	Glu	Leu	Thr	Asn	Asn	Ser	Leu	
	355					360					365				
Ile	Asn	Pro	Ser	Lys	Ile	Glu	Asp	His	Tyr	Ala	Ile	Leu	Ile	Thr	Gly
	370					375					380				
Asn	Asp	Phe	Asn	Lys	Val	Asp	Leu	Lys	Glu	Glu	Glu	Ile	Asn	Val	Tyr
385				390					395					400	
Lys	Ser	Ile	Leu	Gln	Asn	Val	Ala	Met	Asn	Phe	Met	Asp	Lys	Glu	Gln
			405					410						415	

```
<210> 7528
<211> 107
<212> PRT
<213> S.epidermidis
```

Leu 1	Ile	Met	Ile	Lys 5	Lys	Phe	Ser	Leu	Thr 10	Thr	Val	Tyr	Val	Ala 15	Phe
Leu	Ser	Ile	Val 20	Leu	Ser	Asn	Ile	Thr 25	Leu	Gly	Ala	Glu	Asn 30	Pro	Gly
Pro	Lys	Ile 35	Glu	Gln	Gly	Leu	Gln 40	Gln	Val	Gln	Thr	Phe 45	Leu	Thr	Gly
Leu	Ile 50	Val	Ala	Val	Gly	Ile 55	Cys	Ala	Gly	Val	Trp 60	Ile	Val	Leu	Lys
Lys 65	Leu	Pro	Gly	Ile	Asp 70	Asp	Pro	Met	Val	Lys 75	Asn	Glu	Met	Phe	Arg 80
Gly	Val	Gly	Met	Val	Leu	Ala	Gly	Val	Ala	Val	Gly	Ala	Ala	Leu	Val

85 90 95
 Trp Leu Val Pro Trp Val Tyr Asn Leu Phe Gln
 100 105

<210> 7529
 <211> 305
 <212> PRT
 <213> S.epidermidis

<400> 7529
 Met Asp Trp Ile Lys Asp Ala Ile Lys Glu Leu Thr Glu Gly Ile Ala
 1 5 10 15
 Asp Gly Met Met Asn Phe Ile Phe Gln Phe Leu Tyr Thr Leu Phe Tyr
 20 25 30
 Glu Pro Leu Lys Phe Phe Ile Trp Leu Leu Asp Lys Ile Leu Ile Asp
 35 40 45
 Pro Asn Ser Ile Ser Ser Asp Tyr Ile Ser Asn Ala Ser Val Leu Val
 50 55 60
 Asn Ser Leu Ile Thr Ser Ile Ala Ile Cys Val Phe Ala Phe Lys Met
 65 70 75 80
 Val Gln Val Met Lys Gln Asn Ala Glu Gly Asn Ala Glu Ser Pro Gly
 85 90 95
 Tyr Tyr Val Ala Gln Leu Leu Pro Ser Ser Leu Leu Val Ala Val Leu
 100 105 110
 Pro Trp Leu Val Asp Ile Met Thr Lys Leu Ser Tyr Ser Ala Thr Arg
 115 120 125
 Ala Phe Leu Asp Val Gly Gln Lys Ser Tyr Leu Glu Thr Ile Lys Glu
 130 135 140
 Trp Ser Ser Leu Lys Lys Gly Gln Asp Gly Phe Lys Glu Met Leu Gly
 145 150 155 160
 Ser Met Gly Thr Met Ala Gly Ser Gln Ile Met Phe Ile Leu Phe Ile
 165 170 175
 Leu Leu Ile Leu Val Phe Thr Val Val Phe Ile Phe Gln Phe Val Ser
 180 185 190
 Arg Ile Ala Asp Leu Val Ile Met Lys Val Val Ala Pro Leu Val Ala
 195 200 205
 Val Ser Leu Leu Ala Asp Glu Asn Asn Tyr Ile Gly Val Trp Trp Arg
 210 215 220
 Glu Leu Leu Ala Ile Ser Ile Gln Leu Pro Leu Gln Val Phe Thr Phe
 225 230 235 240
 Phe Gly Gly Ile Asn Leu Phe Phe Gly Ala Lys Leu Asp Val Gly Thr
 245 250 255
 Leu Leu Leu Gly Ile Gly Phe Phe Ile Ile Thr Val Lys Ser Pro Ser
 260 265 270
 Phe Ile Arg Ser Met Val Tyr Ser Thr Gly Ser Gly Arg Met Ala Thr
 275 280 285
 Gly Met Ala Gly Ser Gly Ala Lys Leu Leu Val Arg Lys Met Leu Ser
 290 295 300
 Lys
 305

<210> 7530
 <211> 230
 <212> PRT
 <213> S.epidermidis

<400> 7530

Gln Lys Gly Val Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn
 1 5 10 15
 Lys Asp Val Ile Thr Val Ala Val Gly Tyr Tyr Leu Arg Tyr Ala Leu
 20 25 30
 Ser Tyr Arg Asp Ile Ser Glu Ile Leu Arg Glu Arg Gly Val Asn Val
 35 40 45
 His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Ile Leu
 50 55 60
 Tyr Gln Ile Trp Lys Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Ile Asp Glu Thr Tyr Ile Lys Ile Lys Gly Lys Trp Ser Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Met Val Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys
 195 200 205
 Asn Arg Arg Ser Leu Gln Ile Tyr Gly Phe Ser Pro Cys His Glu Ile
 210 215 220
 Ser Ile Met Leu Ala Ser
 225 230

<210> 7531

<211> 230

<212> PRT

<213> S.epidermidis

<400> 7531

Gln Lys Gly Val Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn
 1 5 10 15
 Lys Asp Val Ile Thr Val Ala Val Gly Tyr Tyr Leu Arg Tyr Ala Leu
 20 25 30
 Ser Tyr Arg Asp Ile Ser Glu Ile Leu Arg Glu Arg Gly Val Asn Val
 35 40 45
 His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Ile Leu
 50 55 60
 Tyr Gln Ile Trp Lys Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Ile Asp Glu Thr Tyr Ile Lys Ile Lys Gly Lys Trp Ser Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140

Lys Val Ala Ile Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys
 195 200 205
 Asn Arg Arg Ser Leu Gln Ile Tyr Gly Phe Ser Pro Cys His Glu Ile
 210 215 220
 Arg Asp Met Leu Ala Ser
 225 230

<210> 7532

<211> 230

<212> PRT

<213> S.epidermidis

<400> 7532

Gln Lys Gly Val Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn
 1 5 10 15
 Lys Asp Val Ile Thr Val Ala Val Gly Tyr Tyr Leu Arg Tyr Ala Leu
 20 25 30
 Ser Tyr Arg Asp Ile Ser Glu Ile Leu Arg Glu Arg Gly Val Asn Val
 35 40 45
 His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Val Leu
 50 55 60
 Tyr Gln Ile Trp Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Val Asp Glu Thr Tyr Ile Lys Ile Lys Gly Gln Trp Cys Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Asp Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Met Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys
 195 200 205
 Asn Arg Arg Ser Leu Gln Ile Tyr Gly Phe Ser Pro Cys His Glu Ile
 210 215 220
 Ser Ile Met Leu Ala Ser
 225 230

<210> 7533

<211> 219

<212> PRT

<213> S.epidermidis

<400> 7533

Gln Lys Gly Val Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn
 1 5 10 15
 Lys Asp Val Ile Thr Val Ala Val Gly Tyr Tyr Leu Arg Tyr Ala Leu
 20 25 30
 Ser Tyr Arg Asp Ile Ser Glu Ile Leu Arg Glu Arg Gly Val Asn Val
 35 40 45
 His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Ile Leu
 50 55 60
 Tyr Gln Ile Trp Lys Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Ile Asp Glu Thr Tyr Ile Lys Ile Lys Gly Lys Trp Ser Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Ile Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His
 165 170 175
 Arg His Ile Lys Val Arg Lys Thr Arg Tyr Gln Ser Ile Asn Thr Ala
 180 185 190
 Lys Asn Thr Leu Lys Gly Ile Glu Cys Ile Tyr Ala Leu Tyr Lys Lys
 195 200 205
 Asn Arg Arg Ser Leu Gln Val Leu Leu Gln Ser
 210 215

<210> 7534

<211> 230

<212> PRT

<213> S.epidermidis

<400> 7534

Gln Lys Gly Val Phe Cys Met Asn Tyr Phe Arg Tyr Lys Gln Phe Asn
 1 5 10 15
 Lys Asp Val Ile Thr Val Ala Val Gly Tyr Tyr Leu Arg Tyr Ala Leu
 20 25 30
 Ser Tyr Arg Asp Ile Ser Glu Ile Leu Arg Glu Arg Gly Val Asn Val
 35 40 45
 His His Ser Thr Val Tyr Arg Trp Val Gln Glu Tyr Ala Pro Ile Leu
 50 55 60
 Tyr Gln Ile Trp Lys Lys Lys His Lys Lys Ala Tyr Tyr Lys Trp Arg
 65 70 75 80
 Ile Asp Glu Thr Tyr Ile Lys Ile Lys Gly Lys Trp Ser Tyr Leu Tyr
 85 90 95
 Arg Ala Ile Asp Ala Glu Gly His Thr Leu Asp Ile Trp Leu Arg Lys
 100 105 110
 Gln Arg Asp Asn His Ser Ala Tyr Ala Phe Ile Lys Arg Leu Ile Lys
 115 120 125
 Gln Phe Gly Lys Pro Gln Lys Val Ile Thr Asp Gln Ala Pro Ser Thr
 130 135 140
 Lys Val Ala Ile Ala Lys Val Ile Lys Ala Phe Lys Leu Lys Pro Asp
 145 150 155 160
 Cys His Cys Thr Ser Lys Tyr Leu Asn Asn Leu Ile Glu Gln Asp His

3451

				165					170					175			
Arg	His	Ile	Lys	Val	Arg	Lys	Thr	Arg	Tyr	Gln	Ser	Ile	Asn	Thr	Ala		
			180					185					190				
Lys	Asn	Thr	Leu	Lys	Gly	Ile	Glu	Cys	Ile	Tyr	Ala	Leu	Tyr	Lys	Lys		
		195					200					205					
Asn	Arg	Arg	Ser	Leu	Gln	Ile	Tyr	Gly	Phe	Ser	Pro	Cys	His	Glu	Ile		
	210					215					220						
Arg	Asp	Met	Leu	Ala	Ser												
225					230												

<210> 7535

<211> 227

<212> PRT

<213> S.epidermidis

<400> 7535

Gln	Lys	Gly	Val	Cys	Tyr	Met	Asn	Tyr	Phe	Arg	Tyr	Lys	Gln	Phe	Asn		
1				5					10					15			
Lys	Asp	Val	Ile	Thr	Val	Ala	Val	Gly	Tyr	Tyr	Leu	Arg	Tyr	Ala	Leu		
		20						25					30				
Ser	Tyr	Arg	Asp	Ile	Ser	Glu	Ile	Leu	Arg	Glu	Arg	Gly	Val	Asn	Val		
		35					40					45					
His	His	Ser	Thr	Val	Tyr	Arg	Trp	Val	Gln	Glu	Tyr	Ala	Pro	Val	Leu		
	50					55					60						
Tyr	Gln	Ile	Trp	Lys	Lys	Lys	His	Lys	Lys	Ala	Tyr	Tyr	Lys	Trp	Arg		
65				70					75					80			
Val	Asp	Glu	Thr	Tyr	Ile	Lys	Ile	Lys	Gly	Gln	Trp	Cys	Tyr	Leu	Tyr		
			85						90					95			
Arg	Ala	Ile	Asp	Ala	Asp	Gly	His	Thr	Leu	Asp	Ile	Trp	Leu	Arg	Lys		
		100						105					110				
Lys	Arg	Asp	His	Gln	Ser	Ala	Tyr	Ala	Phe	Ile	Lys	Arg	Leu	Ile	Lys		
		115					120					125					
Gln	Phe	Gly	Lys	Pro	Gln	Met	Ile	Ile	Thr	Asp	Gln	Ala	Pro	Ser	Thr		
	130					135					140						
Lys	Val	Ala	Met	Ala	Lys	Ile	Ile	Lys	Val	Phe	Lys	Leu	Lys	Pro	Asn		
145					150					155				160			
Cys	His	Cys	Thr	Ser	Lys	Tyr	Leu	Asn	Asn	Phe	Ile	Glu	Gln	Asp	His		
				165				170						175			
Arg	His	Ile	Lys	Val	Arg	Lys	Thr	Arg	Tyr	Gln	Ser	Val	Asn	Thr	Ala		
		180					185						190				
Lys	Asn	Thr	Leu	Lys	Gly	Ile	Glu	Cys	Ile	Tyr	Gly	Leu	Tyr	Lys	Lys		
	195						200					205					
Thr	Val	Gly	Leu	Phe	Arg	Ser	Thr	Asp	Phe	His	His	Ala	Thr	Lys	Leu		
	210					215						220					
Val	Ile	Cys															
225																	

<210> 7536

<211> 336

<212> PRT

<213> S.epidermidis

<400> 7536

Ile	Thr	Ile	Leu	Leu	Lys	Leu	Leu	Lys	Tyr	Thr	Phe	Lys	Gly	Val	Phe		
1				5					10					15			
Ile	Met	Ser	Lys	Gln	Phe	Phe	Thr	Val	Glu	Glu	Asn	Tyr	Lys	Glu	Arg		

```
<210> 7537
<211> 47
<212> PRT
<213> S.epidermidis
```

```
<210> 7538
<211> 47
<212> PRT
```


<213> S.epidermidis

<400> 7538

Ala	Cys	Arg	Phe	Lys	Val	His	Lys	Lys	Tyr	Asn	Glu	Lys	Lys	His	His
1				5					10					15	
Tyr	Thr	Asn	Val	Ile	Pro	Thr	Leu	Tyr	Ser	His	Tyr	Thr	Asn	Cys	Leu
		20						25					30		
Phe	Gln	Phe	Pro	Ile	Gly	Trp	Asn	Gln	Gln	Ala	Leu	Val	Cys	Cys	
	35						40					45			

<210> 7539

<211> 52

<212> PRT

<213> S.epidermidis

<400> 7539

Tyr	Phe	Cys	Asn	Gln	His	Ser	Ser	Leu	Ser	Thr	Lys	Gln	Lys	Ile	Ser
1				5					10					15	
Gly	Tyr	Asn	Glu	Ser	Leu	Ile	Ser	Lys	Ile	His	Tyr	Asn	Gln	Ile	Lys
		20						25					30		
Glu	Gly	Tyr	Asn	Glu	Arg	Glu	Lys	Tyr	Lys	Thr	Gln	Ser	Lys	Leu	Tyr
		35					40					45			
Tyr	Phe	Lys	Thr												
	50														

<210> 7540

<211> 68

<212> PRT

<213> S.epidermidis

<400> 7540

Arg	Gln	Ile	Leu	His	Pro	Leu	Asn	Pro	His	Ala	Pro	Thr	Ala	Lys	Arg
1				5					10					15	
Lys	Leu	Phe	Ala	Ala	Phe	Pro	Thr	Leu	Ile	Arg	Phe	Ala	His	Ile	Tyr
		20						25					30		
Ile	Glu	Lys	Lys	Arg	Met	Arg	Lys	Arg	His	Asn	Arg	Phe	Thr	Lys	Asn
		35					40					45			
Arg	Tyr	Thr	Lys	Asn	Lys	Leu	Arg	Asp	Ala	Val	Tyr	Ala	Ser	Leu	Asn
	50					55					60				
Leu	Leu	Ile	Lys												
	65														

<210> 7541

<211> 40

<212> PRT

<213> S.epidermidis

<400> 7541

Pro	Lys	Leu	Trp	Arg	Val	Gly	Trp	Gly	Phe	His	Gly	Ile	Asn	Pro	Met
1				5					10					15	
Lys	Val	Pro	Thr	Gln	Gln	His	Thr	Asn	Ala	Cys	Trp	Phe	Gln	Pro	Ile
		20						25					30		
Gly	Asn	Trp	Asn	Lys	Gln	Leu	Val								
	35						40								

<210> 7542

<211> 40
 <212> PRT
 <213> S.epidermidis

<400> 7542
 Pro Lys Leu Trp Arg Val Gly Trp Gly Phe His Gly Ile Asn Pro Met
 1 5 10 15
 Lys Val Pro Thr Gln Gln His Thr Asn Ala Cys Trp Phe Gln Pro Ile
 20 25 30
 Gly Asn Trp Asn Lys Gln Leu Val
 35 40

<210> 7543
 <211> 166
 <212> PRT
 <213> S.epidermidis

<400> 7543
 Phe Lys Ile Arg Ser Glu Lys Lys Met Lys Glu Arg Tyr Gly Thr Val
 1 5 10 15
 Tyr Lys Gly Ser Gln Arg Leu Ile Asp Glu Glu Ser Gly Glu Val Ile
 20 25 30
 Glu Val Asp Lys Leu Tyr Arg Lys Gln Thr Ser Gly Asn Phe Val Lys
 35 40 45
 Ala Tyr Ile Val Gln Leu Ile Ser Met Leu Asp Met Ile Gly Gly Lys
 50 55 60
 Lys Leu Lys Ile Val Asn Tyr Ile Leu Asp Asn Val His Leu Ser Asn
 65 70 75 80
 Asn Thr Met Ile Ala Thr Thr Arg Glu Ile Ala Lys Ala Thr Gly Thr
 85 90 95
 Ser Leu Gln Thr Val Ile Thr Thr Leu Lys Ile Leu Glu Glu Gly Asn
 100 105 110
 Ile Ile Lys Arg Lys Thr Gly Val Leu Met Leu Asn Pro Glu Leu Leu
 115 120 125
 Met Arg Gly Asp Asp Gln Lys Gln Lys Tyr Leu Leu Leu Glu Phe Gly
 130 135 140
 Asn Phe Glu Gln Glu Ala Asn Glu Lys Gln Glu Asn Ala Leu Ser Asp
 145 150 155 160
 Tyr Tyr Ser Phe Lys Asp
 165

<210> 7544
 <211> 256
 <212> PRT
 <213> S.epidermidis

<400> 7544
 Ala Lys Phe Ile Ile Thr Lys Leu Lys Arg Val Ile Met Asn Glu Lys
 1 5 10 15
 Asn Ile Lys His Ser Gln Asn Phe Ile Thr Ser Lys His Asn Ile Asp
 20 25 30
 Lys Ile Met Thr Asn Ile Arg Leu Asn Glu His Asp Asn Ile Phe Glu
 35 40 45
 Ile Gly Ser Gly Lys Gly His Phe Thr Leu Glu Leu Val Gln Arg Cys
 50 55 60
 Asn Phe Val Thr Ala Ile Glu Ile Asp His Lys Leu Cys Lys Thr Thr

65					70					75					80
Glu	Asn	Lys	Leu	Val	Asp	His	Asp	Asn	Phe	Gln	Val	Leu	Asn	Lys	Asp
				85					90					95	
Ile	Leu	Gln	Phe	Lys	Phe	Pro	Lys	Asn	Gln	Ser	Tyr	Lys	Ile	Phe	Gly
			100					105					110		
Asn	Ile	Pro	Tyr	Asn	Ile	Ser	Thr	Asp	Ile	Ile	Arg	Lys	Ile	Val	Phe
		115					120					125			
Asp	Ser	Ile	Ala	Asp	Glu	Ile	Tyr	Leu	Ile	Val	Glu	Tyr	Gly	Phe	Ala
	130					135				140					
Lys	Arg	Leu	Leu	Asn	Thr	Lys	Arg	Ser	Leu	Ala	Leu	Leu	Leu	Met	Ala
145					150					155					160
Glu	Val	Asp	Ile	Ser	Ile	Leu	Ser	Met	Val	Pro	Arg	Glu	Tyr	Phe	His
				165					170					175	
Pro	Lys	Pro	Lys	Val	Asn	Ser	Ser	Leu	Ile	Arg	Leu	Asn	Arg	Lys	Lys
			180					185					190		
Ser	Arg	Ile	Ser	His	Lys	Asp	Lys	Gln	Lys	Tyr	Asn	Tyr	Phe	Val	Met
	195					200						205			
Lys	Trp	Val	Asn	Lys	Glu	Tyr	Lys	Lys	Ile	Phe	Thr	Lys	Asn	Gln	Phe
	210					215				220					
Asn	Asn	Ser	Leu	Lys	His	Ala	Gly	Ile	Asp	Asp	Leu	Asn	Asn	Ile	Ser
225					230				235						240
Phe	Glu	Gln	Phe	Leu	Ser	Leu	Phe	Asn	Ser	Tyr	Lys	Leu	Phe	Asn	Lys
				245					250					255	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100